

1 GTTCTGAGAA GACAAGAGCA AGGGACTGAG ACCAGGCTTC CGCTGCGGCG  
 51 CGCGAACACA GCCGGGACAC AACCCCCAGC GTCTCCACCC GCTCCTCGCC  
 101 ACCCCGGCGG GAATGTGAGG AAGGAAAGCC CCCAGCGCCG CCGCCCGCCCC  
 151 TCGAAGGCCT CCCAGAGAGC GTCTGGGGG CCCAGCGCCG GAGCCCTTGT  
 201 GCCCGCAGCA CCGCCGGACT GGAGCGGCAG GGCACCCGG GTGCCGCTTC  
 251 TCGGCTTCCA CTCTTCAGAA AGAGCGCGGT GGGGATCAGC GCCTTTCCCG  
 301 CACTCGCAC AACTCCGGGA CGCGCGGCAG GCGCTGGAC CGAGTCCCAG  
 351 TTCCCGCCAG CTCACCTGGA GTCTGGGGCA GCCCCCTGCC GCCCAGCTGC  
 401 ACCCTTGTC GCTCTAGCTT GCGCGAACCT GCCGCTCCTC CACGCCAGG  
 451 TAGTGAAGCC CGCGGCTCCA GGTCTCTGCA GCGCCCTCGG CCCCAGG  
 501 AGCGCACCCA TCACCACTCC CTAAGTGTGCG GCGCCGCCGC TGTCCAAGCT  
 551 GCGCACTGGG GTCCCTCGGC TCGCCCCCTCT CTGGGGTGTGCG AGAGAGGCCA  
 601 GGGAGCGTGC ACCATGAAGT CCGCGCTTT CACCCGCTTC TTTATCCTCC  
 651 TGCCCTGGAT CCTAATTGTC ATCATCATGC TCGACGTGGA CACGCGCAGG  
 701 CCAGTGCCCC CGCTCACCCCG GCGCCCCCTAC TTCTCTCCCT ACGCGGTGGG  
 751 CCGCGGGGGC GCCCCACTCC CGCTCCGCAG GGGCGGCCCG GCTCACGGGA  
 801 CCCAAAAGCG CAACCAGTCT CGGCGCGCAG CACAGCCGG ACGCGACTG  
 851 CCCACCATCT ATGCCATCAC GCCCACCTAC AGCCGCCCGG TGAGAAAGC  
 901 GGAGCTGACC CGCCTGGCCA ACACGTTCCG CCAGGTGGCG CAGCTGCACT  
 951 GGATCCTGGT GGAGGACGCG GCGGCGCGCA GCGAGCTGGT GAGCCGCTTC  
 1001 CTGGCGGGG CGGGCTGCCC CAGCACTCAC CTGCACGTGC CCACGCCCG  
 1051 GCGCTACAAG CGGCCCCGGGC TGCCGCGCG CACTGAGCAG CGCAACGCCG  
 1101 GCCTCGCCTG GCTGCGCCAG AGGCACCAGC ACCAGCGCGC GCAGCCCGC  
 1151 GTGCTCTTCT TCGCTGACGA CGACAAACACC TATACTGCTGG AGCTCTTCCA  
 1201 GGAGATGCGA ACCACCCGCA AGGTCTCCGT CTGGCCTGTG GGCCTGGTTG  
 1251 GTGGCGGGCG CTACGAACGT CCGCTGGTGG AAAACGGCAA AGTTGTTGGC  
 1301 TGGTACACCG GCTGGAGAGC AGACAGGCCT TTGCGCATCG ACATGGCAGG  
 1351 ATTTGCTGTA AGTCTTCAAG TCATTTGTC CAATCCAAA GCTGTATTTA  
 1401 AGCGTCGTGG ATCCCAGCCA GGGATGCAAG AATCTGACTT TCTCAAACAG  
 1451 ATAACAACAG TCGAAGAACT GGAACCGAAA GCAAATAACT GCACTAAGGT  
 1501 TCTCGTGTGG CACACTCGGA CAGAGAAGGT TAACTAGCC AACGAGCAGA  
 1551 AGTACCCACCT GGACACAGTG AAAATTGAGG TATAATAAT TGAAGCAGCA  
 1601 ACTGGTGCAG TTGTCGCCAG CAGTGGATCC ATATGAAAGA GGATGTTGG  
 1651 AGTTTAGGCT ACAGAGCATT CAGGTATTGT TTGTTTACT TCAGTACAGC  
 1701 AGCCTTCTT GTCATCTGAT GGACATCTGT TAAATGGAG CTTGTCAGTT  
 1751 AACATAAGCT AATTGGATGG TTGGTACAAA ATGATGTTT TGTCTTCATT  
 1801 TGTTCTGCAT GTTTTCTCTA CAACAACTAA ATTGGAAGAT TTTTTGTAC  
 1851 AGTGGCGATA CTGCAAGATA CCACTCTTGA GTATATATTT TTTCTTTTC  
 1901 TCCAATTGTC CTTTATAATT GGTAGACTTG AACAGGTTGG TAGACTGAA  
 1951 CAGGTTTTA AAACAGACAA GTATTTGTC AGCTAACAGT TCCTGATGAT  
 2001 TCCTGACTTT GCAATACTAA GTATTTTG GAAGGTTAGT GGCAGTATAC  
 2051 ATCATAGGAA ATAAAAACCC ACAAAATGAA AGGTCTATGG AGTCATGTTT  
 2101 AATGTAGGGA ATAACACATT TGTCAAAACT AGGCACCAATA AAATGAAAC  
 2151 ACAATTACTG TCATAAACCT AGATATAACCT TCAAGGATTG AAGATTGAAA  
 2201 GTGGCTTGTGTTAGT TACCCCTGTT GCATATAGTG CAGAAAAGG  
 2251 TCTTCATGTT AGCACTATGT ACATTAAGAA GAGATCCAA TTACAAGAGA  
 2301 GGCAGATAAA ATTTGAATT TTTAACGATT CATTAAACGA AGTTTGAG  
 2351 TAACATCCAC GTTTATCTTC CTTTCACTAA TCACGTTCCC TGTTAACAC  
 2401 ATCATAACAA CAGCACAGTG AAGTGAATGA TGAAATAAGA GCATTTGAT  
 2451 ACACTAGAAA ACAGTGTCA GTGAGACATT TACATTCTAT TTATATGATT  
 2501 AAACATTGTA TCATACAGTA CCTTCTTACA GGATTACTGG CTAATTGAG  
 2551 GGTGGGGTTT ATACTATTAG AGGTATTACT AACATGATAA CTACTTCCCT  
 2601 TATATGCAA CATTAGAGCT ATAATTTAT TGAGAGGAAA ACTGATTGG  
 2651 CAAGTTGAGC AGCTTCTCAA ATAATGCAGT ACATGAAATC ATGGGAAATA  
 2701 TGAGCAAAGC TGCCCTTGAC ATAAATGAT TTATCAACCT GCTTTTCA  
 2751 ACATCAAATT GAATCAGTAC AGACCAACAC GGTCAATCAG ATCATTCTA  
 2801 ATATGAACAA ATGGGTAAAA AGAAAAAAA TATGCATATG AATAAACAGG  
 2851 GGAACTAGAT GCGTTTCAGC AAGGAATGTC AGGTGGTAGT TCTGGATGAA  
 2901 ACTTGTATTG CAGTTTCAT TTCCACAGTT GTGTGCTGAG AGTCTGACCT  
 2951 GATGAGCTTC CAGACCACATCC TGCTGTGTG CTGGAGGGCT GGCCAAAC  
 3001 TGCAGTAGGG GTTGCACATC TGATACTCAT GCCAGCCATC TGCTGATTCA

FIGURE 1A

3051 TCTGTGAAAC ATATAAAAGG CTTAGTTCAA GAGGCTTACT TCACTTTTAA  
 3101 TTCTTGTITC TTTAGCCACA CAGTTGGTCA TTTTTTCATT AATGTGACAA  
 3151 CTAGTCCAAG CACTGGAATA AAAACAGAGT ACCATACAAA TATTTCTTAA  
 3201 AGCAAATAGC TACTTTGTTT CCTTCTTTAT CTACTTTCTA GATACAGTTT  
 3251 CCCCAAAGAT TAACCACAAAC TTACTTAAAA AAAATAACCA AAGCAATCTT  
 3301 GGGATTTAA TGAGTCGGCT ACTCTAACTA ACTTTCACCT ACACCTAGGAT  
 3351 ATTGTGCTTT AACTACTAAG GAGTAAGAAA ATTTTAGGAA GTAAAATAGT  
 3401 CTAAAATTAT CCTATAAACT TTGTATGATA GATATTATTC TCTATTAAAA  
 3451 TCTTATATAC TTCCTAAATA TTTTAAAGT GGTCTAAAG CATTATTTTC  
 3501 TCTCGCTGAT CTAACACAT AAACATCTAA AATTATTTT CATTGTATGC  
 3551 AATAAAGCAT AAGATTACAT GTATTTTCT TCAAGACTGG AGTCAAATAT  
 3601 ATATATATAT AAGCATCTTA ACCCTGTGAT TCTCTTACTT CAAAATTGG  
 3651 TGATAAGAGA AGGAAAGGCA AGATTTACCA TATAGTGAGT GGGTTAAAA  
 3701 CTTACACTCA GAGTTAGACT GTGTTCTTAA TTTAATACAT TTGACTTGAC  
 3751 TTATTACAG TTTCAAAGAC ACTAACATAA ACTACATCAC TAATCAGGCA  
 3801 TAAGTGTCTG AAGAACGAGA TCACATCTTC ATACCTACTA AAGGACATT  
 3851 TAACCACCTT GTCATTGGCC AGTAGATTGC ACTGATGGAG TGCTGGAGAA  
 3901 CAGCATCACC CTTCTGCATT ATCTGGAAGT AAGAGCCAGT ATTAACCTCT  
 3951 TCCTGGTTCA TCTAGCACCT TAACCTGAGC TGGGTGTGCT TCAGCATGTT  
 4001 GACCATGTGA CTGACACTTA GCACATACAA TTTTTAGAT TCCCAGCGGG  
 4051 TAGAGACCAA TGTTTACCT ATATTCTTGT AAATGGTGGT AGCAAAATTA  
 4101 ACTGTGATAT ATAGTGATTG TGCTAATGTT AGAAATCACT CTAGACTATT  
 4151 CCCTGAATGC TCTAAAGGTA AAACAAGTGA CAAACAGAAA ACCAAGATTG  
 4201 CCAAAATGCT GGAGGAACAT CAATGGGAAG TGAAAAGGA AGAAGAGTGG  
 4251 GAGCATGAAC CTCTCTAAGA GCCTTGTCT GTGCAGCTAG AGAAAAGTCA  
 4301 GAACACAGCA CCTGAAATAG AAATGTTCTA TCTCAGCTCT AACCTAGGTA  
 4351 GAAATAGGAT TTTATAATAT GAGGGGATGT CTGTTACCA CCTTATGGGA  
 4401 ATTGAATCTT TTTGTAACAT TTTAAACAT AAAAGTCATT ATAGGGTATG  
 4451 TAAAAAGAAA ATACAACCTT ACAAAAGGTTT CTCAACACAAA AGAATTTTA  
 4501 CAGAGCCATG GGGCAGTAAT CATCCGACCT GAAAATAGC CTTAGATCCC  
 4551 TCATAAAATA GTGCTTTGAG AATATGAGGC TAGATTTTA TTTCTAAATA  
 4601 AAAGATCCTA AAATTATTAG TGAAGCTAAG TTGTCTAAGT GGACTGTAAA  
 4651 AATGTCCCAC CAGCAAGCTG GATAAAAGCTT AGTGCTAATC TCAGAGGTGA  
 4701 CAGAGAGGGA GTCTCATGAT GCCTGAGATA ATTCTGGCC ATTAGTGGTG  
 4751 TTCACGTTAC AGTTACATTA CAATTTGAAA TGAAAGATGT TTAACCTTTT  
 4801 TTTTACAGAA TACTCTAAA TAGGGATAAT AACACATCAT TTGTCTATCT  
 4851 GATACAACCTT CATAATATTAT ATAGATACTT TTGACCCCTAT AACATATTAT  
 4901 CCCTATTGAA TTCTTTCTGC CAGATCACTA GACTTAAAAA AAAAAAAAAA  
 4951 AAAAAAAAAA AAAAAAAAAA (SEQ ID NO:1)

**FEATURES:**

5'UTR: 1-613  
 Start Codon: 614  
 Stop Codon: 1583  
 3'UTR: 1586

**Homologous proteins:**

**Top 10 BLAST Hits**

		Score	E
CRA 145000039337387	/altid=gi 12018284 /def=ref NP_072131.1  ga...	598	e-170
CRA 98000043628449	/altid=gi 13016548 /def=emb CAC29377.1  (AL4...	409	e-113
CRA 18000005086948	/altid=gi 2217942 /def=dbj BAA20551.1  (D880...	299	4e-80
CRA 53000092569557	/altid=gi 12408652 /def=ref NP_061114.1  bet...	296	3e-79
CRA 114000015335056	/altid=gi 9453799 /def=emb CAB99368.1  (AL1...	263	2e-69
CRA 18000005216702	/altid=gi 4530369 /def=gb AAD22007.1  (AF113...	250	2e-65
CRA 157000140415748	/altid=gi 13195672 /def=ref NP_077218.1  RI...	250	2e-65
CRA 53000092570618	/altid=gi 12408654 /def=ref NP_036332.2  bet...	250	2e-65
CRA 18000005191928	/altid=gi 4008515 /def=emb CAA06742.1  (AJ00...	250	2e-65
CRA 53000092569540	/altid=gi 3892640 /def=dbj BAA34537.1  (AB00...	247	2e-64

**FIGURE 1B**

BLAST dbEST hits:

	Score	E
gi 2099917 /dataset=dbest /taxon=9606 ...	605	e-171
gi 5637891 /dataset=dbest /taxon=9606 ...	303	5e-80
gi 5236525 /dataset=dbest /taxon=9606 ...	303	5e-80
gi 471573 /dataset=dbest /taxon=9606 /...	303	5e-80
gi 1225232 /dataset=dbest /taxon=9606 ...	303	5e-80
gi 11130812 /dataset=dbest /taxon=960...	303	5e-80

**EXPRESSION INFORMATION FOR MODULATORY USE:**

library source:

From BLAST dbEST hits:

gi 2099917	testis
gi 5637891	prostate
gi 5236525	kidney
gi 471573	brain
gi 1225232	ear
gi 11130812	lung

From tissue screening panels:

fetal whole brain

## FIGURE 1C

1 MKSALFTRFF ILLPWILIVI IMLDVDRRP VPPPLTPRPF SPYAVGRGGA  
51 RLPLRRGGPA HGTQKRQNSR PQPQPEPQLP TIYAITPTYS RPVQKAELTR  
101 LANTRQVAQ LHWILVEDAA ARSELVSRLI ARAGLPSTHL HVPTPRTYKR  
151 PGLPRATEQR NAGLAWLRQR HQHQRAQPGV LFFADDDNTY SLELFQEMRT  
201 TRKVSVPVG LVGGRRYERP LVENGKVVGV YTGWRADRPF AIDMAGFAVS  
251 LQVILSNPKA VFKRRGSQPG MQESDFLKQI TTVEELEPKA NNCTKVLVWH  
301 TRTEKVNLAN EPKYHLDTVK IEV (SEQ ID NO:2)

**FEATURES:**

**Functional domains and key regions:**

[1] PDOC00001 PS00001 ASN\_GLYCOSYLATION

N-glycosylation site

Number of matches: 2

1 . . . 67-70 NQSR  
2 . . . 292-295 NCTK

[2] PDOC00004 PS00004 CAMP\_PHOSPHO\_SITE

cAMP- and cGMP-dependent protein kinase phosphorylation site

Number of matches: 2

1 . . . 202-205 RKVS  
2 . . . 264-267 RRGS

[3] PDOC00005 PS00005 PKC\_PHOSPHO\_SITE

Protein kinase C phosphorylation site

Number of matches: 9

1 . . . 27-29 TRR  
2 . . . 35-37 TPR  
3 . . . 144-146 TPR  
4 . . . 63-65 TQK  
5 . . . 104-106 TFR  
6 . . . 35-37 TPR  
7 . . . 144-146 TPR  
8 . . . 200-202 TTR  
9 . . . 201-203 TRK

[4] PDOC00006 PS00006 CK2\_PHOSPHO\_SITE

Casein kinase II phosphorylation site

Number of matches: 3

1 . . . 281-284 TTVE  
2 . . . 282-285 TVEE  
3 . . . 301-304 TRTE

**FIGURE 2A**

[5] PDOC00008 PS00008 MYRISTYL  
N-myristoylation site

Number of matches: 5

1	134-139	GLPSTH
2	152-157	GLPRAT
3	210-215	GLVGGR
4	266-271	GSQPGM
5	270-275	GMQESD

[6] PDOC00009 PS00009 AMIDATION  
Amidation site

213-216 GGRR

**Membrane spanning structure and domains:**

Helix	Begin	End	Score	Certainty
1	5	25	1.850	Certain
2	239	259	0.881	Putative

**FIGURE 2B**

**BLAST Alignment to Top Hit:**

>CRA|145000039337387 /altid=gi|12018284 /def=ref|NP\_072131.1|  
galactoside beta-1,3-glucuronyltransferase [Rattus  
norvegicus] /org=Rattus norvegicus /taxon=10116  
/dataset=nraa /length=324  
Length = 324

Score = 598 bits (1525), Expect = e-170  
Identities = 291/324 (89%), Positives = 301/324 (92%), Gaps = 1/324 (0%)  
Frame = +1

Query: 1 MKSALFTRFFFILLPWILIVIIMLDVDTRRPVPPPLTPRPYFSPYAVGRGGARLPLRRGGPA 180  
MKSAL RFFFILLPWILIVIIMLDVD RRP P LT RPYFSP+ VG GG+R+PLRR P  
Sbjct: 1 MKSALCNRFFFILLPWILIVIIMLDVDTRRPAPQLTSRPYFSPHTVCGGSRVPLRRSSPG 60

Query: 181 H-GTQKRNQSRPQPQPEPQLPTIYAITPTYSRPVQKAELTRLANTFRQVAQLHWILVEDA 357  
+KRN+SRPQ QPEP+LPTIYAITPTYSRPVQKAELTRLANTFRQVAQLHWILVED  
Sbjct: 61 RDAAEKRNESRPQLQPEPRLPTIYAITPTYSRPVQKAELTRLANTFRQVAQLHWILVEDR 120

Query: 358 AARSELVSRFLARAGLPSTHLHVPTPERRYKRPGLPRATEQRNAGLAWLRQRHQHQRAQPG 537  
A RSELVS FLARAGLP+THLHVPTPERRYKRP LPRATEQRNAGLAWLRQRHQHQ AQPG  
Sbjct: 121 ATRSELVSSFLARAGLPNTLHVPTPERRYKRPWLPRATEQRNAGLAWLRQRHQHQSAQPG 180

Query: 538 VLFFADDNTYSLELFQEMRTTRKVSVWPVGLVGGRRYERPLVENGVVGVWYTGWRADRP 717  
VLFFADDNTYSLELFQEMRTTRKVSVWPVGLVGGRRYERPLV+NGKVVGVWYTGWR DRP  
Sbjct: 181 VLFFADDNTYSLELFQEMRTTRKVSVWPVGLVGGRRYERPLVKNGKVVGVWYTGWREDRP 240

Query: 718 FAIDMAGFAVSLQVILSNPKAVFKRRGSQPGMQESDFLKQITTVEELEPKANNCTKVLVW 897  
FAIDMAGFAVSLQVILSNPKAVFKRRGSQPGMQESDFLKQITT+ ELEPKANNCTKVLVW  
Sbjct: 241 FAIDMAGFAVSLQVILSNPKAVFKRRGSQPGMQESDFLKQITTVEELEPKANNCTKVLVW 300

Query: 898 HTRTEKVNLANEPKYHLDTVKIEV 969  
HTRTEKVNLANEPKYH+DTV IEV  
Sbjct: 301 HTRTEKVNLANEPKYHMDTVNIEV 324 (SEQ ID NO:4)

>CRA|98000043628449 /altid=gi|13016548 /def=emb|CAC29377.1|  
(AL450320) bA156I14.1 (UDP-glucuronyltransferase-S)  
[Homo sapiens] /org=Homo sapiens /taxon=9606  
/dataset=nraa /length=197  
Length = 197

Score = 409 bits (1039), Expect = e-113  
Identities = 197/197 (100%), Positives = 197/197 (100%)  
Frame = +1

Query: 1 MKSALFTRFFFILLPWILIVIIMLDVDTRRPVPPPLTPRPYFSPYAVGRGGARLPLRRGGPA 180  
MKSALFTRFFFILLPWILIVIIMLDVDTRRPVPPPLTPRPYFSPYAVGRGGARLPLRRGGPA 60  
Sbjct: 1 MKSALFTRFFFILLPWILIVIIMLDVDTRRPVPPPLTPRPYFSPYAVGRGGARLPLRRGGPA

Query: 181 HGTQKRNQSRPQPQPEPQLPTIYAITPTYSRPVQKAELTRLANTFRQVAQLHWILVEDAA 360  
HGTQKRNQSRPQPQPEPQLPTIYAITPTYSRPVQKAELTRLANTFRQVAQLHWILVEDAA  
Sbjct: 61 HGTQKRNQSRPQPQPEPQLPTIYAITPTYSRPVQKAELTRLANTFRQVAQLHWILVEDAA 120

Query: 361 ARSELVSRFLARAGLPSTHLHVPTPERRYKRPGLPRATEQRNAGLAWLRQRHQHQRAQPGV 540  
ARSELVSRFLARAGLPSTHLHVPTPERRYKRPGLPRATEQRNAGLAWLRQRHQHQRAQPGV  
Sbjct: 121 ARSELVSRFLARAGLPSTHLHVPTPERRYKRPGLPRATEQRNAGLAWLRQRHQHQRAQPGV 180

Query: 541 LFFADDNTYSLELFQE 591  
LFFADDNTYSLELFQE  
Sbjct: 181 LFFADDNTYSLELFQE 197 (SEQ ID NO:5)

## FIGURE 2C

Hmmер search results (Pfam):

Model	Description	Score	E-value	N
PF00561	alpha/beta hydrolase fold	2.6	8.2	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00561	1/1	112	130 ..	216 ..	233 .]	2.6	8.2

FIGURE 2D

1 CACAGTGTGTT CATCTCTGAA TAGCCTTGGT TCCTGGAGAG GATGTAATAG  
 51 CAAATAGGTT TTATGGCATA GTTGGACCAA CCAAAAGTTC CCCACTAAC  
 101 AAGGTTAGTG ATGTTTTAG TACAATTCA GAAACACATG AATTTTATT  
 151 CAGCAAACAC AAGGCATTTT AACCAAATT AAAATTCCA ACAGGATGAA  
 201 CCAGACTTCA GTAACCTAGG GGAGAGGGT GCACGTGTT CTAAGAAAA  
 251 CCTTTCTTA AAGGGAGGC TTGACTTCTT TCCTCTTCCC CATCCTGGCA  
 301 TGATGCTGGT GCAGAATACA TTTCCAAGGT TGTGTTATAT TCAGAGGCAC  
 351 ATTAAGGCTAT TCGAGAGAA GGGAAAGAGGT CTAATGGCTT CGTTGTTTC  
 401 TATGTTAGG ATGCACTAAT CTGCAGAGTT TAATGTATGA GTTGTGGATG  
 451 GCACAGGGAA GTTGGGACAG AAGGCTAGCT CTAGGGAGTT GTTGGGGTGG  
 501 CTGGGTGTTA GTCTGAAATT TCACTCTCAC GTTTCAGAAT CTGAAGAGGA  
 551 AGTTAGGGAA ATTACAGAT GAGCCAATGC CTTTAAACAG GTGGGGGGTT  
 601 CAGGGTAGG ACTGGGAGAA GAGGAGCTGT CAGAAAAGCT GGAGAGCCAT  
 651 TCGCCCCAGA GCTCTCAGTT GCACCAAGAAC GCACAGTCGG AGAGAGATTT  
 701 ATTTGTGAAC AAGCCCGAGA AAGGCAGACAA ACCCAGACAA GATGGGCTCA  
 751 GAAATTATTT ATCATAGGCT AGGGCAGAAC AGTCTGGAGC TTTCCCTCTG  
 801 CTTTGCAGC ACTTCCCTGG GACCTGCCTG GGAAGCACAG CCCTCTTCC  
 851 TGGTAAGTTA CAGAAGGTCA GGCACACTCAGC TAGTAGGCCA GCTAGACAAC  
 901 AAAAGTGTCA TAAACTAAGT GCCAACTGTT TACTTGGGGT CTTCCAGACC  
 951 CTATCATGGT TCTATTGTC ATGGTACACT CTGTTTGATT TCAATCGAC  
 1001 CATCTTTATA TGTAGGAAGG CCAAACCGGC CCGGCTGTGT TGGGTGGGAT  
 1051 TTCTGCAGGC CATGCAGTGA GGACGCCACT AGCTATAGAC ACACGCAGGA  
 1101 GACCCACGTT CTATTTCCAT ATGCCACTTG CCACTGACCT CAGAGAAATC  
 1151 ATTTTAAACC CTGAACCTCA GCTTCCTTAT CCTGAAAATG AAGGCCATT  
 1201 TACTTCTTAG GCCTTCTTGA CAGGAGCCTT GGGAGAGCCA AACGGAGTAA  
 1251 TTCCGGTGC AGCGAAGAAC TGGGAGGGAC CGTGAATCTCA AATTACTGAA  
 1301 GAAAATAAG TTAAACATGC TCGGCTGGAG TTTTAGGAAT TCCACCCGCC  
 1351 CCCACCCGCC ATGATCAAAC TGCACTCAGG CAGCAGCCCT CCGAATTGAT  
 1401 TCTTCTTAT GGACTGTCTC ACATGCCAA CACCTATGTG CAGCACCCCT  
 1451 CCATCTCCGT GGGCTCTTAT TGATGTCGCT CTTGCACTGAA AAGCGCTTT  
 1501 TGTGCGCGCT GTTCGATACA CCCCAGCACA TCAACCGCAGC AGCTGGGAGC  
 1551 AGGAGGAGGA ATCCCTTCGC TTTCTCCCT CTTTCACACT CGAACCCCTAG  
 1601 GCATCAGCAG CAACCGCGCT AGCCCGGCAA ATTTCACGAC GTGAATGGAT  
 1651 TTTCTGGCT CATCTCCAA GACCTTGCGG TATTTACAA AGCTGAAGAG  
 1701 AGGTGAACGA GCATCACCCCC CTCCAGGAGG TCGTGCAGCC CGCGGGGAGC  
 1751 GCTCCTCCCG CTCCCTCCACC CGCGGTGAG CGGCCGCCCT CCGAGCTTGC  
 1801 TCGGGGGCC GTTAGCGCCA GACCCGGCGG AGAGCCAAGG GGTCCCTCCG  
 1851 CGCCTCCCTC TCGCAGCCCC TCTCCACCA TAGCAGCGCT GCTGTCTCC  
 1901 CACAGGAGGA CTTGGGAGGA CGCTGGATTG TGCAGCGCCCG CGCCCCCTC  
 1951 GCTTTTCTT TCTTCTTGT CTTTGGGATC TTGCTGCTGG ATCCGGAGAG  
 2001 GTTCTGAGAA GACAAGAGCA AGGGACTGAG AGCAGGCTTC CGCTGCGCG  
 2051 CGCGAACACA GCGGGGACAC AACCCCCAGC GTCTCCACCC GCTCCTCGCC  
 2101 ACCCCGGCGG GAATGTGAGG AAGGAAAGCC CCCAGCGCCCG CGCCCCGCC  
 2151 TCGAAGGCGT CCCAGAGAGC GTCCTGGGG CCCCGGGCTG GAGCCCTTGT  
 2201 GCCCGCAGCA CGCGGGACT GGAGCGCGA GGCACCCGG GTGCCGCTTC  
 2251 TCGGCTTCCA CTCTTCAGAA AGAGCGCGT GGGGATCAGC GCCTTCTCCG  
 2301 CACTCGGCAC AACTCCGGGA CGCGGGCGC GCGGCTGGAC CGAGTCCCGC  
 2351 TTCCCGCCAG CTCACCTGGA GTGGGGGCA GCCCCCTGCC GCCCCCTG  
 2401 ACCCTTGTC GCTCTAGCTT GCGCGAACCT GCCGCTCCTC CACGCCAGG  
 2451 TAGTGAGGCC CGCGGCTCCA GGTCTCTGCA GCGCCCTCGG CCCCAGGAC  
 2501 AGCGCACCCA TCACCACTCC CTAAGTGTGTC GCGCCGCCGC TGTCCAAGCT  
 2551 GCGCACTGGG GTCCCTCGGC TCGCCCCCTCT CTGGGGGTGTC CGAGAGGCCA  
 2601 GGGAGCGTGC ACCATGAAGT CGCGCTTTT CACCCGCTTC TTTATCTCC  
 2651 TGCCCTGGAT CTAATTGTC ATCATCATGC TCGACGTGGA CACGCGCAGG  
 2701 CCAGTGGCCC CGCTCACCCCC GCGCCCCCTAC TTCTCTCCCT ACGCGGTGGG  
 2751 CGCGGGGGGC GCGCGACTCC CGCTCCCGAG GGGCGGGCCCG GCTCACGGGA  
 2801 CCCAAAAGCG CAACCGAGTCT CGGGCCCGAG CACAGCCGGA GCCGCAGCTG  
 2851 CCCACCATCT ATGCCATCAC GCCCACCTAC AGCCGCCCGG TGCAGAAAGC  
 2901 GGAGCTGACC CGCCTGGCCA ACACGTTCCG CCAGGTGGCG CAGCTGCACT  
 2951 GGATCCTGGT GGAGGAGCGG CGGGCCCGCA GCGAGCTGGT GAGCCGCTTC  
 3001 CTGGCGCGGG CGGGGCTGCC CAGCACTCAC CTGCACGTGC CCACGCCCG  
 3051 GCGCTACAAG CGGCCCGGGC TGCGCGCAGC CACTGAGCAG CGCAACGCC  
 3101 GCCTCGCCTG GCTGCGCCAG AGGCACCAAGC ACCAGCGCAGC GCAGCCCCG

FIGURE 3A

3151 GTGCTCTTCT TCGCTGACGA CGACAAACACC TATAGTCTGG AGCTCTTCCA  
 3201 GGAGGTAAAG GCCAGCCTGC CCCGCTGGGT GGGCGAGGGC GGGAGTGGGC  
 3251 CTCCGGGCCG GCGGGGCTGC AGTCACACGC CCCTTGCACT CGGGGTGCAC  
 3301 TTTTGAGTTTC TCAGTTCTCC GTGCGGCAT TCGGGGCACC GAGTGGAGCC  
 3351 GCTCCCTGCT GGCACCTCCGC AGCCTCCGCT GGCGCGTGGGG GTGGAGGGGC  
 3401 TGTGTGTGAG AGGATCACTG TGGCTTAAGG GGCGGGAGTC TGCCCTGGGG  
 3451 CTTTTCTGTG TGGAGATTGT GTCAAGAGAA TAGCACAGGT GTGAGGCGC  
 3501 GGAATGATTT CCAGGGGCCA GGCTCTGAC GACCTGAGGA TGGAGCTTAG  
 3551 ACCTGCAGGC GCTGGCTGCG ATAGGAGATC AGGGAGGGAC CTGCACCGTA  
 3601 GCGGGTGGCG GTGGAGGGGT GGGGGTGGTG GGGACGGGTA GGCTAGGTGT  
 3651 TACTCGAGGC TTTTCAGTGC CTACAGGTGT GATTCTCAGT CTAGGACCAT  
 3701 ATAGGGAGAA AGGTGGAGAT AGCCTAGAGA GAAATTTGAC TATTGCGGCC  
 3751 CACTGGCACG GAAATGGTTG TTAGAAGAAA CACTGACTTC TATGGAGGTC  
 3801 CTTCCCTCTCT TTCCCACACC TCACAAAAGT CTTTCTGAC CCTCAAGATT  
 3851 ACTTTTTTTT TTTTTTGCA AGAAAACCCCT TTCTGGAAAA TAAACTGTT  
 3901 TGCCCTGTGG TTACGTCTTT TTTGCAGCCC AAGGTAAACA TCTGGGCTGC  
 3951 CTGATCCCTT TTCACAACCT TTCTCTAAGG CCTCTTTTG GCGAGTTAGC  
 4001 CAGGACACAT TTGGCGGGGC CTTTTCGTC TTTCTGGTGC AGCCAGGTCC  
 4051 TGAGTGCATC CGGGCTCCCT GCTGTTGAGA TGGCCCATGA GTTCCCTGGG  
 4101 ATGGCCACGC GCGCACCGCC CCCCCCCC GCCCCCGGCA GGCACAGGGT  
 4151 TAGAACAGGT GTTCTTCCTT GAGGCTGGTA TCTTGCCTGGTG TGTGTGTG  
 4201 TAGCCTGCAA ATGAGACTGA GTGGCATGGG TTTTCTCAGT TTTCTTCAGT  
 4251 CTACCGAATT ACAGCCAAAG AAAATCTTCT TGATTGATT GACGCCCTGT  
 4301 GAGACTGTTG CTTCCCTCCA CCTGAAATTT CTTGACGTCC TGCTTCAGAG  
 4351 ACTCCCCCTC AATTCCCCCTT CTCCCAAGTA AACTGGACAT TGGGAAAATA  
 4401 CTATGTTGTA GTTGGACACT GAACTGCTAA AATAATCTGT GTGTCTGGTC  
 4451 ATCAGATAACC CTAACTGCTT CCCACACTT CATCCTCATC TCTGGGTG  
 4501 TTTCTTAACC CCAGGGCAGA GCTATTCTGT ACTCTTCCAG TTTAATT  
 4551 CTGTGTGGCT TAAAAAAAAT TTTCTTAAAG GTAATTGCCG CCTTCATTT  
 4601 TATTCTACCT CTCTTTCATG AATAAAAAGGC ACAGTAATTG TCCTTCATCT  
 4651 TTTCTTTTCC ATCCTTTCAC TGTAGAGGGC TTTCTTCCA CGTTTCTCCA  
 4701 AATGAATAAA TAAGCTTGGC ATTGTATAGT ATGGTCTTAA CTCAACCCAA  
 4751 GATTAGAGAT ACCATCTGAC GTTTTTAACT GGGCTTTAA TCCTGCATCA  
 4801 GTGCTCCCCC CTCCAAAAGA AAAAAGTGGC TTGCATCTGA AGCAAAGACT  
 4851 GTACATTCA ATGCACCACA ATTAAAAAAC CGCAAGGTCT TTTTATTTC  
 4901 TTCTACAAC TCGAAGTTGC CTCGTCGTG ACAATATGTG GTCTTGTGA  
 4951 AGTAAAATAG TGACACATTAC TGTTAATGAA CACTGTAGGA GGCTAGATTG  
 5001 TGAAGGAGGA ATGATTAGT TTATTCCGAG CTTCTAGCCT CTTGGTGTGA  
 5051 GGTGTTAGAA GAATTGGCAC ACGCAGGCAG TGAAATGATT CAGGACACAG  
 5101 CCTTCCTTGT ATGCTTCCCA AACTGAAAGG AGGGTTTGTG GGTGGGGGAT  
 5151 ATTAAGCATC AGGAGAAAAT TCCAGTAGGT TTTTCATTAG TCCATATGGG  
 5201 GGAAAATATA AAATGAGGAG AGGGTAAGGA GAAAAAAATA GTGTTGTCA  
 5251 AGAGGACATT ATAAAGGAAA AACGAAAAC TTCAAGACA CTAAACTTT  
 5301 GTACAATTGG AAGTAATGCA ATAAAATAAA ATAAGAGCAT ATGCAACATT  
 5351 TTTTAATGGT GAGGTGCCAC ATATACAAA AATACAACAG GTTTATTGTT  
 5401 TCTGTTGTCA TTTTAAGCAT AATAGGCATG ACATACTTAG AATTTAAGTT  
 5451 TTCTATCTCC TGGAGGTAC TCCCAGACAG TAATTTTATG ACTAGTACCT  
 5501 TTCTCTACCA CTCCCCCACC AGCATTGTT TTGGACAGAT TAGGCCTTG  
 5551 TTTGACATAT ATGTATGCTG ATACATTCAAG TTTTCTTTAT TATAACATT  
 5601 TCCATGCATG GCAAACATTA TTGAATTCCA TCATTAGGCT AGTGAATT  
 5651 ATGAATTCTT AGTCTTGTGC ATTTCCAGA ATTTGGAAAT CCGTAGGTT  
 5701 ATTTGTGAGA CAGCCTACCA TACACCCGTT CTCAGATTAA TGATTCCGTG  
 5751 TAAATTATAG TTAGACATT GTTCTCTGGA GAAAACGTAG GACCAGATAA  
 5801 AACATGAAA ATCTACAGCT CCTTGGGGGA AACCAAAGAT GCTGATTAGG  
 5851 AATGCTATAG GGCTGAGGCAT TATATCTCAG CCCTTTATAT TGTGCATGCA  
 5901 CACCAATTAG TTTTTCACTA ATTCAACAGTA CTTAAGGAAA GAATACCCCA  
 5951 AGTCAGGTTT CATTTTTAT TCATGGTGCT TCTAATTTC CTTGGTTGATG  
 6001 TTAAAGTGGAA TAAGATAAAA GGAGGAAAAT GAACCACGTA CAAATTAGCT  
 6051 CCGTAAGTAT TGGCTGCAAA TGAAGGAAAAG CAAAGGATGA AAGGTCTCCA  
 6101 AATTAAATTAA AAGACGCAAC AGGCAATCTG TGTCAATTAA TTCCCTCC  
 6151 GTAACTGGAA ATGGTGCTTT GTCATCTCAT ACAGCTAATC AATTTTCAGC  
 6201 CTTTCCTTTTC AACTGATCTG CATTGCCAGG AAAGAAATAT TTGCATTGAA  
 6251 TACTCTTATG TTAACAGCCA AATCCATTG CAAATGAAGT TTAGTGTGAA

FIGURE 3B

6301 TCTTAGCTAC AGAAATGGGC CTGTTCATCG GAGAAGGAGG TGGTGGGTT  
 6351 TTTCAAGTTT CAAAAATCTC AACAGCTACT CCTCTTCTTC CTGTGGCATT  
 6401 GATGGGGTTT TGCACGTGGA ATCACAGGTAA ATCCTGCCTC CCTGTGCATC  
 6451 CTATCCATCT CCCTCTCTGG AAAAGCTTAC TTGCAAAGGA TTTAAGCTGC  
 6501 TTTAATAAAA GCCACAACTA CAGATAATG TGACTTTATT TTTAGTCATG  
 6551 TTTCAATAA CACTATTGAT CAGATTCTG TTTTCACCA GAAAACCTTC  
 6601 AAAGCTTCT TAAATTTAA ACAGATGCTT TTCAGGTGAA GTTGGTTCA  
 6651 CCTCTGGAAA TCAATTGAAT TGAAATACTA AAAAAAAATA GCACCTTCCA  
 6701 AGCAAGAAAA AAAAAAAACTT TAGAAATTTT GAAGTTAATG AAATAAGACT  
 6751 GGAAGACAGG CTGGCTCTCA GACACTTAAG GGGTTATCAA AGGAGTCAGT  
 6801 GACTGAGATT GCATCTAGAA GATGTTCTG GAAAGCAATG AACTAAAGAA  
 6851 GCCCCTTGCT TGAATCTTT GTTGGGTGCT ATTCAGCTAT TTGTGTACTA  
 6901 GGCAGATAAA GGAGTTTGTG GGATTAATTC TGTCTTGCTT TTTTTTCAGA  
 6951 AGTATTTGTG TGCTTTCCCT CTTTACCTGC TGCTTATTGG AGTCATAATC  
 7001 TGAAGGATAT ACGAGTTTAC AATGTTGGC CCTTTCCCCC CTAAATAGTA  
 7051 CTTCTATTTA TGTTTCCCTGA AAGGAAACAT GAGATTTACC TTTTACCTT  
 7101 GGTACATTTA CTTTATTTAG GGTAACTCTT TTTAAAGTGA AGGAACCTAG  
 7151 AAGATTTCT TGGGTGGAAC ATTAAAAGAC CATTTCACCT GAAATGTGCC  
 7201 CCTTGATTT TATTTCTTC CCTCTGAAAG CTATTAAGAG TCATGCCATA  
 7251 GGTCTGATAA AATGTGAGAA TTTTATAGAA ATGTATATAT GAAACTACAG  
 7301 CCAATTTCT TAGGCTATAA ATGTTAGGTT TTCTTTAATC TCCCTGGGTG  
 7351 TACAGTATTT GAATTATGGT TCGTTTTGTA TAAAGAGTTT CTTTGGAGAC  
 7401 CAGTAGTTT CATTGGATG TTGATATTTT AATGGACCAAG AAATAACAAT  
 7451 TTGGCCCTAA AGATGTTCC CCTTCTGCCT CTTCTTATTG TCTTTTCCA  
 7501 TCATTCTTCC TCTCTCAACC TACTTTTCAC TGATGATTCT GTCCTGGA  
 7551 TAGACATGAA AACATGTTG GATTATTGCT TGGTGCATG AATGTTGAT  
 7601 CTTTAAACA TTAGGCTGTG TGCTGCTTCT TGAAACCAT TGTTGGTGGC  
 7651 TCCCTTTTT CTGTCTACTC TGCTGCCTC TAAATTACAA GCTGGTAAT  
 7701 TTTCTTTGT GTGAACAGTA ATGGAATAGT AATTGCTTT AAGGCATGCT  
 7751 GCAAAAGCAA AATAGAAAAT CCAAAGTCAA TGGCTTATT TATTAACAT  
 7801 TTCAGGTGGT ATTCAAGTAG TGGTAGGTTT TTTGTTGTCG TCATTGTTT  
 7851 TTGACAGAA TTCAATATTG TACAGATATG TCTATTTAA TGTTTGAC  
 7901 TCTGGAATAT TCAGCCTGTG TAAGTTAACAA CATAATATTT TGATTACAG  
 7951 TGCTTGAA GCATGAAATT TAAGTTTGCA ATGGAGCTCA AATTCTCCA  
 8001 CCAAAATACA AATAAAATTG TTATACCAAGT ACATAGATAG ATGCATAGGT  
 8051 AGGTTAGAA TACATCTCCA AAGCACAGAA ATAAAACCAA GATAATTG  
 8101 TGTTCATGCC TGGTAATTTC TGCAACAAAT TTTAAATCAA TGTTAATACC  
 8151 CTATATCATG GATACAAGCA AAATATAGTT GACATAAAATT GAGCATTAC  
 8201 TATAGGCAA GAAGTACCCCT TAGGGTTTA CGTGTATTAT TTAATCTCA  
 8251 TAACACCCCTG AGGTAGGTAA TAGTACTGTC TCTGTTGTT TGCTGTTTA  
 8301 ATACTAATGC TAATATTAG TTATGGACGC AGTCCCTTGG TGAGTACAGA  
 8351 GGACTTAAAC AAATGCAACC TGACGGTAAT ATAGTTGTTT ACCTCTGATC  
 8401 TATATAATCA GTATCCCCGT TTTAACAGA AGCACTAGGA AGTAACCTGA  
 8451 AAATGTATG TAGCTGTTAT GTGGCAGAGA TAGAATTG AACCAGGTG  
 8501 CCCTGGTTCT AGCGCCTGCA TTGTTGACTG TCCTGAAACT CATGTCATTT  
 8551 AACACATGAA AATATGTAT CATTATAATA AGTAAAGCAC CTGATTAGCA  
 8601 GGAGCCTTGT GATATTATTA CTGTCTCTG CCATTTTGAA ATTCAAGGTCT  
 8651 TTCTTCTTGG TTATGTCAAC TCTTAGCTT CCTCTTTGAC CTTTTGTTAC  
 8701 TTTTTCCCTT TTGTTGTTA ATGTATTACA TTGAAAATA AAATTTTTT  
 8751 TTTTGCAAG AAAATGTACT TTATTAGCTT CCTTTGTTCT GTGGGTTGAT  
 8801 CTTCTGGAT ATTTCTTTAT TTTATTATT TTTATTATT TTAACTTTA  
 8851 AGTTTTAGGG TACATGTGCA CAATGTGCAAG GTTACTTACA TATGTATACA  
 8901 TGTGCATGC TGGTGTGCTG CACCCATTAA CTCGTCTTTT AGCATTAGGT  
 8951 ATATCTCCTA ATGCTCTCCC TCCCCCAAC CCCCCACCCCA CAACAGTCCC  
 9001 CAGAGTGTGA TGTTCCCTT CCTGTGTCCTA TGTGTTCTCA TTGTNNNNNN  
 9051 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9101 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9151 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9201 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9251 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9301 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9351 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 9401 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN

FIGURE 3C

### FIGURE 3D

12601 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12651 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12701 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12751 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12801 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12851 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12901 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 12951 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13001 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13051 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13101 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13151 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13201 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13251 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13301 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13351 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13401 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13451 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13501 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13551 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13601 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13651 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13701 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13751 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13801 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13851 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13901 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 13951 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 14001 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 14051 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 14101 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN  
 14151 NNNNNNNNTGT GGGATATAAT CTCCTGGTGC GCCGTTTTT AAGCCTGTCA  
 14201 GAAAAGTCA GTATTAGGT GGGAGTGACC TGATTTTCA GGTGCCCTCT  
 14251 GTCACCCCTT TCTTTGACTA GGAAAGGGAA CTCCCTGACC CCTTGCGCTT  
 14301 CCCGAGTGAG GCAATGCCTC GCCCTGCTTT CGCTTGGCA CGGTGTGCTG  
 14351 CACCACTGT CCTGCGCCCA CTGTCGGCA CTCCCTAGTG AGATGAACCC  
 14401 GGTACCTCAG ATGGAAATGC AGAAATCACC CATCTCTGC GTCGCTCACG  
 14451 CTGGGAGCTG TAGACCGGAG CTGTTCCAT TTGGCCATCG TGGCTGCCAG  
 14501 CTCAAAATTA TATGTTAATA TATTTGTTGT GTAGACTATA ATGTTTGAT  
 14551 ATAGGGATAC ATTGTGGAAT TACTAAAGCT AATTAATATA TTCATTACCT  
 14601 TACAATTTA TCATTTTTG TGTGTGTTGT GAAAACATT AAAATCTCCT  
 14651 CAGCAGTTG CAGGTGTACA ATACATTGTT AATAACTATA GTCACCAATT  
 14701 TGTGTTGCAG TTGATCTTCT AAATGTATTG TTTCTAACTG AAATTTGTA  
 14751 TCCTTGACC AAACATTCTC CCAATTCTA CCCCTACCTT TTTTCTCCTG  
 14801 ATAATATTTG GTCTTGTGAA AATTTTATCT CATCTCTCAC TATCTGTGAT  
 14851 TTATAGACCA TTTGATATTG ATTTTACAA GCTAGATAAA AACTGCCAAG  
 14901 TTAGTATATA AACTGTAGTC TTTTATTTT TAAACTACGT ATTCTTGTGA  
 14951 ATAAGAATTG ATAACTTCTA TAGATATTAA AATTAAGTTT TTCTCTATT  
 15001 GCTATGTATA CATCAACAAC TCTGTCCT AGGCGTGTAT CATGTCAGGG  
 15051 CAGGAGAAC TGAACGGAAG AATAATTTTC AGGGTAGAAT GGGAGAAAAT  
 15101 ACAGAATTAT GTGAAGCAGG CTCAGGGTT TATTATTGAA ACAGAGGAGA  
 15151 GGAGCTGGGG GCCTGAGCCA ATTGCGCTG AAGCCAATGT GGCTGAGATG  
 15201 GCTCCCTCTG GGAACAGAGA TGTGCTTGG GGAGCCTTGG TTCTCCTCAC  
 15251 CAATATACCC CTTATGTTGG CTGCTGCAGG CAGCACTACC AGGTTCTATT  
 15301 GACTGCTCAC TTGTTGGTAG AAGGTTGTT AATTTCTTG TCCGATTCT  
 15351 TCTGAGATTA GGAATTTCCT TGGATTAAAA ACAAAATAAA TCATTGGTTG  
 15401 AGTCTTTTG CAGGTTAAAAA AAAACAAGAA AACTTGGAGG TGGATTTGCT  
 15451 GAGGAGGACA GCCATGTTCT CTACCGAGAAG TCAGATTGGG TCTTTTCCCT  
 15501 AAAACAACCA AAAACGCAGT AGTTTGTAA CTTTTTAAAAA TCCGTCTCCT  
 15551 CCACCTGTGG AAAGAGAACT TTAAACACTA TTATGTTAC ATGCTGAATC  
 15601 TAAGACTGTT GTTCCCTCA GCTGAACTGC AGATAATTCTT AAATTGTACC  
 15651 TGCATCTCTA GTGAAAGCTG AGTGTGCTAA ATGCTGACCA TTCTCCATTA  
 15701 ACTGAGATTT CAGTTATCTA AGAGATTGAG ATCTTAGCAG TACTACTGTA

FIGURE 3E

15751 TTACTCTGTA AGATTCCCTTC TACCTACCTG AGCTCAAAC TCACTCCTATT  
 15801 CAGAAAGATGT TTTAATATAA CAAGTCAGTA GGCCCTCTCT ACCACTTAAC  
 15851 AAATATTAAT TGAGCACCTA CTGTGTACAA GGCACGTGTC TTAATTAAGT  
 15901 CAGGGAGTAT TTCAGCTCCC TGAAACAGAG AGCATCTCAG CCCTCCCAGA  
 15951 TTGATTCTCT GGACTAAATA TGCACTGGTAG CTTCACTGCC TGTTGAGAGA  
 16001 AATGAATGTG TCTGGGAGTG TAAAGCAGAG GTCCCTAATG GAGTTGTTGA  
 16051 TTGTAGGAGT AATTGTGGAG GAAGTACAT TTCACTGAG AAGTAAAGAA  
 16101 CAACAGGGCC TAGTGGGTGA TGGGACAGGG ATGAAGGAGC CCTCCAGAGA  
 16151 GAGAAAACCA TATTTGTGGA CCTGAATACT CAGAGACCTG AAGGATGTC  
 16201 TTGATGGCAA GAGGCTGGGT GGTGAGAAGA TGAGGTGGAG AAATAGGCAG  
 16251 CCACTTTCC ATCTCTGCA TGTCAAAGTG CTGTTCTCAT CTTTGAGAGA  
 16301 AGCTGTCCTG TAAAGAACTC TTCAGGTTCT GTGTATTTGG AAGTGGCATC  
 16351 TAAATCATGC CCATTGGAAT CTTCTTCTG GATACTATCA TGTCTTTATG  
 16401 TAAACTTGTG AATTAAAAG TATACATAGC AGTGTGGAG CAGGCTTCC  
 16451 TTTTATTTT TTGCACTG GTTTCAAGAA TGCCCATTAG GCAAATTTT  
 16501 GACCTTAAC TTTTCAATA GGCCTGGAT AAGGTGGGTG GTAAATTGAT  
 16551 AGGAAAACCA TAGATAAGTA TTTGTCCATC TAGTTGTACC AAAGAAGTGG  
 16601 TAATATAGAC TTTTGTGGAT CCTTTAGAGC ACCTGATATC ACATTAATAA  
 16651 ATATGATACC TGAATATGTA TTTCAAGTGT TTCTCCACT AGAATACAG  
 16701 GGTAGGAATT TTCTTTTGT TACTGTTGTA TCTGTAGTGT CCAGAGCAGT  
 16751 GCCTAGCATG CAGTGAATGC TTATTAATAA TTTTTGAAT GAATGAATTA  
 16801 TAAGACACTT GGAAGCTGAG GGAATTATTATAAACAGAG TTTAATCCCT  
 16851 GAAAGGAGTC CTGCACAGAG ATTGTCAATC AAATCATAGT TTTGAAGTCT  
 16901 GTGTTGTATG TCTAAGATTG TATTGAGCCC TTTAAATAGA AACTGGAAGA  
 16951 TAAACGTGGT CCCTACTCTG ATTCTAAGAG CTTTTATAACT AAAAGGAAAG  
 17001 AGAATGTCA GAGCATTATG GTATATAGCA AGGCATTACC ATCAACAGCC  
 17051 ATTAAAAGGG GAGGTTTGTG AAGGTGGTCC TGAGTCAGTT GAGTATTG  
 17101 CCTCTTCACA CGTGTGAGAG GCTGGGGGAGC TCACATAGGC  
 17151 GTAACAGCCC ATGTTCAAAAT CCAGCTTCAC TGCTTAGTGT TTGCAATTACA  
 17201 TTGGCAAGGG TTGACTGCCT CGAGTGTATTG TTTAAGTGC TCTAGGCAAG  
 17251 TAATAATAT TAGTTCTTT TGCCCTTGTG TTTCACTAT GGGTACTGC  
 17301 CCTAAATTGAG GGTATACCAAG ATAATTGCAC TGCTTGATT TGTTAAGTGC  
 17351 CTCTAAATGT TCTCTCCTG ACATCTGGAC TATGTTCTA GAGGCCTAGG  
 17401 GGGAGGAGGA GGTAAAGGCA CTTGACTTTC CCAAATTAGT CTGTACCCAA  
 17451 GTGAACTGCA ATAATTGGG TACCTTAATT ACACCAATTGG GTATTACTAG  
 17501 GGTGATTACA GGGACAAGAG TTAAATAGGG CTTGTCACAA AAGAGTCCTG  
 17551 GGAGGAAGTG AGATGTGAGA GAACTAAAAG CATCTAAAGG ACATTTTAGA  
 17601 TGGAGAGGAG GTGAAGGGTG TTCTCTGTG GGTCTGACT TCTGATGCTA  
 17651 ACTCTAACG GTGAAAGCTA GGAAGTTGAC TTACATGTAG CTCAGAGGAG  
 17701 GATGCTAACG TGGCTCACTG CAACTCCAC CTCCCTGGATT GAAGCGATTC  
 17751 CCCTGCTTCA GCCTCCTGAG TAGCTAGGAT TACAGGTGCA AGCCATCATG  
 17801 CCTGGCTAAT TTTTGTATTG TTAGTAAAGG TGGGGTTCA ACATGTTGGC  
 17851 CAGGTGGTC TCAAACCTCT GACCTCAGGT GATGCACCCA CCTCGGTTTC  
 17901 CCAAAGTGCT GGGATTACAG GTGTGAGCCA CGGTGCCTGG CCCTAGGTGT  
 17951 GGTTTTAAT TACTATGTA TCCCAGGGCC CAGTGTGGAC CTAGGACATA  
 18001 GTTACTACAT GATACAGTGA TTATCGTTGG CACAAATGAA TGAATCAAAG  
 18051 AGATAGTATG TTACAAAGGA GAGGGCACGA AATAGATTTT TTTTTGAGC  
 18101 ACATGATTAG AAGCAGTATT TTAAGGTCA TTCCCTGGGT GGGAGGTTA  
 18151 GGAATATTCT TCTGACCAGC ACCTGTTGGA GGAGGTGGAA AGGATCCAG  
 18201 ATGCCAGCCT TCTCTGTGTC CACCCCTCTC CCAGCCTTGC CTGGGGACAC  
 18251 TGAGCCCCCT GCTGGGCTTC AAGTGCCTGA TGCTTTTTTG GGAAGCCCCA  
 18301 TAAGCTTGCT TCTCTTTTG CAAACATTCG TTAAGTTTTC ATTAATAAAA  
 18351 ACATTCTAAA GCTTATTTAG TCCAGAATGAA GGAAAATGTA GGAGAGAGAG  
 18401 AGGGTGTGGT TGTGTGTG TGCGAGGGGG GTGCTGTGT GTGGTTTAC  
 18451 CTACCTATGT GGTTGCCCT TCTTACCTGT GAATGCAGTG GCTGCTTCC  
 18501 TTGTTCTTC TCCACAGACC CTGTACCCCTC CATTTCAAGTT TCTGGCAAGA  
 18551 ATTGTGGCCA GACCCAGGGG TGCTGATGCA GTGGTCCCCA ACATTTCTG  
 18601 GTCACATAAT TTCTAAAAGA ATTTTGTAAAC ATTAACCCCTC TGGGATATTT  
 18651 TTTAATTGAC ATCTACATT TATTTTTTT ATTATTTTAT TATTATTATA  
 18701 CTTAAGTTTT AGGGTACATG TGCAACATGT GCAGGTTAGT TACATATGTA  
 18751 TACATGTGCC ATGCTGGTGT GCTGCACCCA TTAACTAGTC TTTTAGCATT  
 18801 AGGTATATCT CCTAATGCTA TCCCTCCCCC CAACCCCCAC CCCACAACAG  
 18851 TCCCCAGAGT GTGATGTTCC CCTTCCTGTG TCTGTGTTCT CATTGTTCAA

FIGURE 3F

18901 TTCCCACATCTA TGAGTGAGAA CATGCGGTGT TGGTTTTTG TCCTTGCAAT  
 18951 AGTTTACTGA GAATGATGAT TTCCAATTTC ATCCATGTCC CTGCAAAGGA  
 19001 CATGAACCTCA TCATTTTTTA TGGCTGCATA GTATTCCATG GTGTATATAT  
 19051 GCCACATTTT CTTAATCCAG TCTATCATTG TTGGACATTT GGGTTGGTTC  
 19101 CAAGTCTTTG CTATTGTGAA TAGTGCTGCA ATAAACATAC ATGTGCATGT  
 19151 GTCTTATAG CAGCATGATT TATAGTCCTT TGGGTATATAA CCCAGTAATG  
 19201 GGATGGCTGG ATCAAATGGT ATTTCTAGTT CTAGATCCCT GAGGAATCGC  
 19251 CGCACTGACT TCCACAATGG TTTTACTAGT TTACAGTCCC ACCAACAGTG  
 19301 TAAAAGTGT TCTTATTTCTC CACATCCTCT CCAGCACCTG TTGTTTCTG  
 19351 ACTTTTAAT GATCACCATT CTAACGGTG TGAGATGGTA TCTCATTGTG  
 19401 GTTTGATTT GCATTTCTCT GATGGCCAGT GATGAGCGTT TTTTCATATG  
 19451 TCTTTGGCT GCATAAAATGT CTTCTTTGA GAAGTGTCTA TTCAATGCTC  
 19501 TCGCCCACTT GTTGTGATGGG TTGGTTGGTT TTTCTTGTA AATTGTTTG  
 19551 AGTTCATGT AGATTCTGGA TATTAGCCCT TTGTCAGATG AGTAGGTTGC  
 19601 GAATATTTTC TCCCACATTTG TAGGTTGCCT GTTCACCTGT ATGGTAGTTT  
 19651 CTTTGTGCTG GCAGAAGCTC TTTAGTTAA TTAGATCCCA TTTGTCAATT  
 19701 TTGGCTTTG TTGCAATGC TTTGGTGTGTT TTAGACATGA AGTCCTTGCC  
 19751 CATGCCTATG TCCTGAATGG TAATGCCTAG GTTTCTTCT AGGGTTTTA  
 19801 TGGTTTAGG TCTAACGTTT AAGTTCCAT CTTGAATTAA TTTTTGTATA  
 19851 AGGTGAAGG AAGGGATCCA GTTTCAGCTT TCTACATATG GCTAGCCAGT  
 19901 TTTCCCAGCA CTATTTATTA AATAGGAAAT CTTTCCCA TTGCTTGT  
 19951 TTCTCAGGTT TGTCAAAGAT CAGATAGTTG TAGATATGCA GCGTTATTC  
 20001 TGAGGGCTCT GTTCTGTTTC ATTGATCTAT ATCTCTGTTT TGGTACCAAGT  
 20051 ACCATGCTGT TTTGGTTACT GTAGCCTTGT AGTATAGTTT GAAGTCAGGT  
 20101 AGTGTGATGC CTCCAGCTT GTTCTTTGG CTTAGGATTG ACTTGACGAT  
 20151 GTGGGCTCTT TTATGGTTCC ATATAAACTT TAAAGTAGTT TTTTCCAATT  
 20201 CTGTGAAGAA AGTCATTGGT AGCTTGTGGA GGATGGCATT GAATCTATAA  
 20251 ATTACCTTGG GCAGTATGGC CATTTCACA ATATTGATT TCCTACCCA  
 20301 TGAGCATGGA ATGTTCTTC ATTGTTGTGTT ATCCTCTTTT ATTCATTGA  
 20351 GCAGTGGTTT GTAGTTCTCC TTGAAGAGGT CCTTCACGTC CCTTGTAGT  
 20401 TGGATTCTA AGTATTTAT TATCTTGAA GCAATTGTGC ATGGGAGTT  
 20451 ACTCATGATT TGGCTCTCTG TTTGTCGTG ATTGGTGTAT AAGAATGCTT  
 20501 GTGATTTTG TACATTGATT TTGTATCCTG AGACTTTGCT GAAGTTGCTT  
 20551 ATCAGCTTAA GGAGATTTT GGCTGAGACA ATGGGGTTTT GTAGATATAC  
 20601 AATCATGTCG TCTGCAAACA GGGACAAATT GACTCCCTCT TTTCCTAATT  
 20651 GAATAACCTT TATGCTCTTC TTCTGCCAA TTGCCCTGGC CAGAACTTCC  
 20701 AACACTATGT TGAATAGGAG TGGTGAGAGA GGGCATCCCT GTCTTG  
 20751 CGTTTCAAA GGGATGCCT CCAGTTTTG CCCATTCAAGT ATGATATTGG  
 20801 CTGTGGCTT GTCATAGATA GCTCTTATTA TTTTGAGATA CGTCCCATCA  
 20851 ATACCTAATT TATTGAGAGT TTTAGCATG AAGCGTTGTT GAATTTGTC  
 20901 AAAGCCCTT TCTGCATCTA TTGAGATAAT CATGTGGTTT TTGCTTGT  
 20951 TTCTGTTTAT ATGCTGGATT ACATTATG ATTTGCATAT ATTGAACCA  
 21001 CCTTGCAATCC CAGGGATGAA GCCCACTTGA TCATGGTGA TAAGCTTTT  
 21051 GATGTGCTGC TGGATTGGT TTGCCAGTAT TTTATTGAGG ATTTTGAT  
 21101 CCATGTTCAT CAAGGATATT GGTCTAAAT TCTCTTTTTT GGCTGTGCT  
 21151 CTGCCCGCT TTGGTATCAG GATGATGCTG GCCTCATAAA ATGAGTTAGG  
 21201 GAGGATTCCC TCTTTTCTA TTGATTGGAA TAGTTTCAGA AGGAATGGTA  
 21251 CCAGTTCTC CTTGTACCTC TGGTAGAATT CGGCTGTGAA TCCATCTGGT  
 21301 CCTGACTCTC TTTTGGTTGG TAAGCTATTG ATTATTGCCA CAATTTCAGA  
 21351 GCCTGTTATT GGTCTATTCA GAGATTCAAC TTCTTCTGG TTTAGTCTT  
 21401 GGAGGGTGT A TGTGCCGAGG AATTATCCA TTTCTCTAG ATTTTCCAGT  
 21451 TTATTTGCGT AGAGGTGTTT ATAGTATTCT CTGATGGTAG TTTCTATT  
 21501 TGTGGGATCG GTGGTGTAT CCCCTTATC ATTTTTTGTT GTCTATTGA  
 21551 TTTTCTCTC TTTCTCTTCTT TATTAGTCTT GCTAGTGGTC TATCAATT  
 21601 GTTGATCCTT TCAAATAAC AGCTCCGGA TTCATTAATT TTTGAGGG  
 21651 TTTTTGCTGTT CTCTATTCTC TTCAGTCTG CTCTGATTAGT TTTTATT  
 21701 TGCCCTCTGC TAGCTTTGA ATGTGTTGTC TCTTGCTTCT TTAGTTCTT  
 21751 TAATTGTGAT GTTAGGGTGT CAATTGGAA TCTTCCTGC TTTCTCTGT  
 21801 GGGCATTAG TGCTATAAAAT TTCCCTCTAC AACTGCTTT GAATGTATCC  
 21851 CAGAGATTCT GGTATGTTGT GTCTTGTTC TCGTTGGTTT CAAAGAACAT  
 21901 CTTTATTCTC GCCTTCATT CGTTATGTAC CCAGTAGTCA TTCAGGAGCA  
 21951 GGTTGTTCAAG TTTCCATGTA GCTGAGCGGT TTTGAGTGAAG TTTCTTAATC  
 22001 TTGAGTTCTA GTTTGATTGC ACTGTGGTCT GAGAGACAGT TTGTTATAAT

FIGURE 3G

22051 TTCTGTTCTT TTACATTTGC TGAGGGAGGC TTTACTTCCA ACTATGTGGT  
 22101 CAATTTGGA ATAGGTGTGG TGTGGTGCCTG AAAAAAATGT ATTTTCTGTT  
 22151 GATTTGGGGT GGAGAGTTCT TTAGATGTGT ATTAGGTCCG CTTGGTGCAG  
 22201 AGCTGAGTTC AATTCCCTGTG TATCCTTGTG AACTTTCTGT CTCGTTGATC  
 22251 TGTCTAATGT TCACAGTGGG GTGTTAAAGT CTCCCCATTAT TATTGTTGG  
 22301 GAGCTAAGT CTCTTTGTAG GTCACTCAGG ACTTGCTTTA TGAATCTGGG  
 22351 TGCTCCTGTA TTGGGTGCAT TTATATTAG GATAGTTAGC TCTTCTTGT  
 22401 GAATTGATCC CTTTACCGTT ATGTAACGGC CTTCTTGTG TCTTTTGATC  
 22451 TTTGGTGGTT TAAAGTCTGT TTTATCAGAG ACTAGGATTG CAACCCCTGC  
 22501 CTTTTTTTGTG TTTCCATTG CTTGGTAGAT CTTCCCTCCAT CCTTTTATTT  
 22551 TGAGCCTATG TGTGTCTCTG CACGTGTAGT ATGGGTTTCC TGAATACAGC  
 22601 ACACTGATGG GTCTTGACTC TTTATCCAAT TTGCCAGTCT GTGTCTTTA  
 22651 ATTGGAGCAT TTAGTCCATT TACATTAAA GTTAATATTG TTATGTGTGA  
 22701 ATTTGATCCT GTCATTATGA TGTTAGCTGG TTATTTGCT CGTTAGTTGA  
 22751 TGCAGTTTCT TCCTAGCCTT GATGGTCTTT ACGTTTGGC ATGATTTGC  
 22801 AGTGGCTGGT ACCGGTTGTG CCTTCCATG TTTAGTGTCTT CCTTCAGGAG  
 22851 CTCTTGTAAAG GCAGGCCTGG TGGTGACAAA TTCTCTCAGC ATTTGCTTGT  
 22901 CTGTAGAGTA TTTTATTCT CCTTCACCTA CATTTTAAA ATCATTAA  
 22951 ACTGTTGCAA AACTTTGAT TTCCAGTGCA TTATAAATGT TGACATTGT  
 23001 AATGAAATTAAATATCAGTAGATCTA TAAATATTGT TAACAGTTG  
 23051 ATACCCACCA CCATTCAATT AATAAACATA CTTTCAATG ACATTGGAT  
 23101 GGAGATATAT ATATACACAT ATATATATTGTTAAGTGAG ACAGGGGTCT  
 23151 CTCTCTGTTG CCCAAACTGG AGTGTAGTGG TCGGATCACA GCTTACTGCA  
 23201 GCCTCCACCT CCCTGGGTCA AGCAATTCTC CTGCCCTCACC CTCCTGAGTA  
 23251 GCTGGGACTA CAGGCACATG CCACCATACC TGGCTAATT TTATTTTAT  
 23301 TTTTTTTG TAGAGACAGG GTCCTCTAT GTTCCCTGG CTGGTCTCAA  
 23351 GCTCTGGCT TCAAGCAGTC CTACCGCCTC ATCTTTCCAA AGTACTGGTA  
 23401 TTACTGGTGT GAGCCACAC ACCTGGCCAC GTTGGATAT TTTATATTGC  
 23451 TCTTTTTTT TTCTATCTC ATCCCTCTC AGAATTTTAT CTTAGCATAA  
 23501 TATTTTGAGG TTCAAAGTC TCTCCCTATT ACACATATCT ACAATGACAA  
 23551 AAAGAATATA GATAGAATTAAAGTTTAT AATCCTGTGG CTATCAGCCT  
 23601 CTGCTTCTAGA AAAGCTTCAG GACTGACTTA CCATTACAAT TAGTATTGGT  
 23651 AAACAATTAA TCAAAACAAAC AATAAAATGT ACAGGGTTGG GTAATTAACT  
 23701 ATTAACACATA AAAGCTACAT TTATTAGATT TCTTAGTGTAC ATGGATGGAG  
 23751 CATTGGTTG TTGATTATAT ATTCTGTATT GACAAATTAT ACAGATTGCT  
 23801 AGAGATAGAA TTTAGTATAA ATTCATTCC TATTAGGTCA ACTTTTTTT  
 23851 ACGTAAAGAA GTAATTAAGG TGGGAATCAT TTTCTTACAG CAGTGTCT  
 23901 CAGTTTTTG AACTCTCAAG CTTAACGCC AAAATTACAT GGTGATCTGA  
 23951 CAGCAAAAC TATTTTAATG ATTTTTAAAT GATATTAGGT CACCTCCAGT  
 24001 TTTGTTGAAT GCAAATAGTT AGAAACCTCT CGTTGCCCA AAGGATTAT  
 24051 TACCCATTCA TTAGAGACAT TGGCTTCTT AATAAAGATA GCAATATTTC  
 24101 TGATTACCTT TGTTGGTGC CCTGGAGGT ATATTAGGTG GGACAGTGCA  
 24151 TTTAATAACA ATACAGGATG GGTGAGCAGT CAGGCCCTT GTGAAGTGGG  
 24201 AGAAGGGTGA TGTGAAGTGG GGTGGGGCGG GGGTGGGGGG CAGAGCGAGA  
 24251 GAGAACGATG GAGAACCTGC CCCTATCCAA GTGGATCAGT TTTAGGAAAG  
 24301 CTTATGCCGT ATGTAGGGAT GCCAAGGGTC TGGGAATTAA TTCCCTAATC  
 24351 TAAAGTTATC TGCATTACAA TATTCCATGG AGAGTTGTAT GCATTCAAGT  
 24401 ATCATGCACT CCCAGTCTGA AAAACTGTC TTTTGGTTGA AAGAGTATAA  
 24451 GGACTTGGAA GATGGGGCCT CTAGGCCTGA CTGAGCCAAA GGCTCCCATG  
 24501 ACCTCAAGGG AACTGACTAG TGCTTTTTTC ATTTTTTACT GCGTTCTGGG  
 24551 TCCCACCCCTT GGCATTCAAG TGTGTGCATG AGCTGCTGT TAAATTTCAT  
 24601 CATCTGCTTT ACAAAATGAGG AAAAGCCTG ATATCCAGCT CCCTCATAGG  
 24651 ACCTGATAAT AATACATATG GTTCTGAGAA TAAACAGGAGG TAATAGGTAC  
 24701 GTAAAGTGGG TAAACAGAGT AACTTCACTC TCTATTGTG TCGTCTCTCAG  
 24751 AAGTCTGGGG CAACAGGAGC TGTGGAGGC TCCAGAAGAC AAGATGTAC  
 24801 AAAGCCACCT AGCTACTGTG GCTGTACCAA TCTGTACAGT CATAGCGGCC  
 24851 CCAAGGTGCT GCTCTGTTG CTGATGGAA TGAGATTTA CGTATGGTCC  
 24901 ATATATGGAC GTGTTGTTT ACATCTAAAT AAACCTGGCA TTGCAAGATG  
 24951 AAAATGCCAG TATCATTTT AAAGGTCAAG TGACAGTTG GGAAGATTT  
 25001 TATAACTTTG ATAAGTTCTC CAGCTACATC TGTTCACACT GGCAAGAGTG  
 25051 CTAGAGACAT TCTTGGGAAG TCTTTCTAT CAGAGGAGCT GCAGCCTTGC  
 25101 TCTGCAGAAA AGTTCTGTATC ACAGTCATCA GAGTATTG GGCTCATGCA  
 25151 CTAACGTGTTA ATTATTTCA TTTTCATTA ATGAAAATT TTTTAATT

FIGURE 3H

25201 TTTTCATTCT TCTTTAATGA ATTTAACTAT TTGCCTCTAC CTTTGCTTCC  
 25251 TGCTTTGTAT ACTGATAAGA CAGGTTTTGG GGTGTTTATG TTTTCTGGTC  
 25301 TTGCTTTCC CCTTTGTTTT AGGATTAAA AAACAAAAAG GTTAAGAGGG  
 25351 TAGGGTGACA GTGCTTGAG TTTCTGTTTT ACAGCAATCC CAGCTGTTCC  
 25401 TCTGAAAATT GGTTGATTGT CCTATAGTTT AAAATATATA GATGTTCATT  
 25451 TGATTGGCTC TTGTAATCT AGTGACATTT AAAAGTACAT GGCAGCTAGT  
 25501 CATGGTGGCT CACACTTATA ATCCCAGCAC TTTGGGAGGC TCAGGCAGGA  
 25551 GGATGGCTTA GCCCAGGAGT TCGAGACAG CTTGGGAAAC ATCATGAGAC  
 25601 CCCAACTCTA CAAAAATTAA TAAATAGTTG TGAGTGGTGG CATGTGCTG  
 25651 TACCCCTCAGC TACTTGAGAG GCTGAGGTGG GAGGATTGTT TGAGACCTGG  
 25701 AGTTTGAGGT TGTGGTGCTC TATGATTGCA CCACTACACT CCAGCCTGGA  
 25751 TGATAGACTG AGACCCCTGTC TCAAAAAAGA AAAAGAAAAA AGTTCATGTC  
 25801 TATTCTGTTT TTGTTATGT TACTTTCTC TAAACATGAA GAAAAGCAGT  
 25851 GAGGAGAAC AAAATTGAG TATTCTGTG TTTTTATCA TAGTAAAATA  
 25901 TACATTGCC ATTTTATATT TATCCTGATA ACCTTCAGTG TTGTAAAATA  
 25951 CACATTACA ATTATTCAATT TAACCTGATA ACCTCTAATC TCTTTTCCAT  
 26001 GAATCGGACT AGGTACCTCA TATAAGTGGA ATCATACCAT ATTTTAACTT  
 26051 TTGTGCTGG TTTATTCAC TTAATGTCCT TAAGGTTCAT CCACATTGTA  
 26101 GCATGTCCTCA GAATTTAATT CCTTTTGGG GCTGAATAAC ATTCTATTAT  
 26151 ATGTATATT CACATTTCG TTATCCATTCT ATCTCTTGAT AGGAAGTTGT  
 26201 GTTGCTTCA CATTTCACCT ATTGTGAATA ATACTGGTAC CAATATTAGT  
 26251 GTACACATAA TCTGAGTCCC TGCTTCCGT TCTTTTGGG ATATACACAG  
 26301 AAGTAAAATT GCTAGACACA ATGGTACTTC TATGTCAGTT TTTTGAAGAA  
 26351 CTACCCCTACT GTTTTCCATA GCAGTTACAC CATTTCACAT TTCTATCACC  
 26401 AGACCAACGAG GGTAACAATT TCTCCACACC TTAGCCACCA CTTGTTATT  
 26451 TTTGTTTTT GGGTAAATAGC CATGCAAAA AATATGAAGT AAAGTGAAT  
 26501 ATCATTATGA AAGGTGTGAA GTGATATGTC TTTGTGATTT TGATTTGCAT  
 26551 CTCTCCTATA ATTAGTGTGTT TTGAACATCT TTTCATGTGC TTATTGGCCA  
 26601 TTTGCTGTGTC TTCTTGGGG AAATATCTCT TCAAGCCTAT TCTGCCATT  
 26651 TTTGAATTGG GTTTTGTGTT TTTTAGGAAT TCTTTAGATA TTTTGGATAT  
 26701 TAGTCACTTA TCAGATATGT GATTTCGAAA TGAGGATGGC CTTTTTATT  
 26751 TGTTGATTGT GTTCTTGCA CAATAGTTT TATTTCGAT GAAATATAAT  
 26801 TTTCTATTTT GTGCTTTGG TGTTATATAT CTAAGAAATC ATGCCAATT  
 26851 CAATGTCATG AAGGCTTTCT CCTGTTTCTC TCTAATAGTG TGTAGTTTA  
 26901 GCTCTTTGT ACGTGGTGTG GGGTAAGGGT TCAACTTCAT CTTTTTGCAT  
 26951 GGGAAATATCC AGTTTTTTTC CCAGCTGCAT TTGTCAAAAAA GACTCTCTT  
 27001 TCTTCGTTG AATGATCTCA GTGGAAGTC CTGATCTCAT CAAAATCAC  
 27051 TGACCATATG TGGGAGCATA ACCACCTGAT GGGTTCTCT TGCTGCTGC  
 27101 CCAAATATAG CTGGTTTATC AAGATGGAA TTGCAATAGA GAAAGAGCTT  
 27151 TACACATGTA CAGCTGGCTA AATGGGAGAC TGGAGCTTTA TTATTAATAA  
 27201 AATAAGCCTC CCCCCAAATT TGGATGCTAG GGTGTTCTCT TTTTTTTCT  
 27251 TTTTTTATTA TTAACTTTA AGTTCTAGGG TACATGTGCA CAACGTGCAG  
 27301 GTTTGTTACA TATGTATATA TGTGCCACGT TGGTGTGCTG CACCCATTAA  
 27351 CTCATCATT ACATTAGGTAA TTCTCTTAAT GCTATCCCTT CCCCCCTCCCC  
 27401 CCAACCCACT ACAGGCCCCA GTGTGTGATG TTCCCCACCA TGTGTCCAAG  
 27451 TGTTCTCATT GTTCAGTTCC CACCTATGAG TGAGAACATG TGGTGTGTTG  
 27501 TTTTCTGTGTC TTGAGATAGT TTGCTCAGAA TGATGGTTTC CAGCTTCATC  
 27551 CATGCCCCTA CAAAGGACAT GAACTCACTC TTTTTTATGG CTGCATAGTA  
 27601 TTCCATGGTG CATATGTGCC ACATTTCTT AATCCAATCT GTCATTGATG  
 27651 GACATTTGGG TTGGTTCCAA GTCTTGCTA TTGTGAATAG TGCGCAATA  
 27701 AACATACGTG TGCATGTGTC TTTATAATAG CATGATTTAT AATCCTTGG  
 27751 GTATATAACC AGTAATGGGA TGGCTGGTC AAATGGTATT TCTAGTTCTA  
 27801 GATCCCTGAG GAATCACCAC ACTGCTTCC ACATGGTTGA ACGAGTTAC  
 27851 ACTCCACCA ACAGTGTAAA AGTGTCTCTA TTTCTCCCAT CCTCTCCAGC  
 27901 ACCTGTTGTT TCCTGACTTT TTAATGATCG CCATTCTAAC TGGTGTGAGA  
 27951 TGGTATCTCA TTGTTGTTT GATTTGTATT TCTCTGATGG CCGGTGATGA  
 28001 TGAGCATTTC TTGTTGCTGC ATGCTTTTG AGAAGTGTCT  
 28051 GTTCATATCC TTGCTCCACT TTTTGATGGG GTTGTGTTGAT TTTTCTTGT  
 28101 AAATTGTTT AAGTTCTTG TAGATTCTGG ATATTAGGCC TTTGTCAAGAT  
 28151 GGGTAGATTG CAAAAATATT CTCCCATCT GTGGGTTGCC TATTCACTC  
 28201 GATGGTAGTT TCTTTGCTG TGAGAACCT CTTAGTTA ATTAGATGCC  
 28251 ATTTGTCAAT TTGACTTTT GTTGCCATTG CTTTTGGTGT TTTAGTCATG  
 28301 AAGTCCTTGC CTATGCCTAT GACCTGAATG GTATAGCCTA CGTTTTCTTC

FIGURE 3I

28351 TAGGGTTCTT ATGGTTTAG GTCTTACATT TAACTCTTA ATCCATCTG  
 28401 AATTAATTT TGTATAAGGT GTAAGGAAGG GATCCAGTTT CATCTTCTA  
 28451 CATATGGTTA GCCAGTTTC CCAGCACCAT TTATTAAGTA GGGATCTT  
 28501 TCCCCAATTTC TTGTTTTGTC CAGGTTGTC AAAGATCAGA TGGTTGAGA  
 28551 TGTGTGGTAT TATTTCTGAG GGCTCTGTC TGTGCCATTG GTCTATATCT  
 28601 CTGTTTAGT ATCAGTACCA TGCTATTGG TTACTGTAGC CTTATAATAT  
 28651 AATTGAAAGT CAGGTAGCAA GATGCCTCA GCTTGATCT TTTGCTTAG  
 28701 GATTGTCTG GCAATGTGGG CTCTTTTG GTTCCATATG AACTTTAAAG  
 28751 TAGTTTTTC CAATTATGTG AAGAAAGTC TTGGTAGCTC AATGGGATG  
 28801 GCAGTTAAC TATAAATTAC CTTGGGCAGT ATGGCCATT TCACAATACT  
 28851 GATTCTTCCT ATCCATAAGC ATGGAATGTT CTTCCATTG TTTGCTCT  
 28901 TTTATTTCAT TGAGCAGTGG TTTGTAGTTC TCCCTGAAGA GGTCTTCAC  
 28951 ATCCCTGTGTA AGTTGGATTG CTGGGTGTT TATTCTCTT GAAGCAATTG  
 29001 TGAATGGGAG TTCACTCATG ATTTGTCCTCT CTGTCGTGTT TTGGTGATA  
 29051 GGAAAGCTG TGATTTTGCA CATTGATTT GTATCCTGAG ACTTTGCTGA  
 29101 AGTTGCTTAT CAGCTTAAGG AGATTTGGG CTGAGACGAT GGGGTTTCT  
 29151 AAATATACAG TCATGTCATC TGAAACAGA GACAATTGAA CTTCCGTGTT  
 29201 TCGTATTGA ATAGCTTTA TTTCTTTT TAAATATATA TTTTTATTAT  
 29251 ACTTTAAGTT CTAGGGTACA TGTGCACAAT GTGCAGGTTT TTACATATGT  
 29301 ATACATGTGC CATGTTGGTG TGCTGCACCC ATTAACTCGT CATTACATT  
 29351 AGGTATATCT CCTAATGCTA TCCCTCCCC CTCTCCCTAC CCTGGTGTG  
 29401 GAAGTTCCCC TTCTCTGTGTC CAAAGTGTCT CATTGTTCAA TTCCCACCA  
 29451 TGAGTGAGAA CATGCGGTGT TTGGTTTTT GTCCTTGCGA TAGTTGCTG  
 29501 AGAATGATGG TTTCCAGCTT CATCCATGTC CCTACAAAGG ACATGAAC  
 29551 ATCCCTTTTAT ATGGCTGCAT AGTATTCCAT GGTGTATATG TGCCATGTT  
 29601 TCTTAATCCA GTCTATCATG GTTGGACATT TGGTTGGTT CCAAGTC  
 29651 GCTATTGTGA ATAGTGCCTC AATAAACATA CATGTGCATG TGTCTTATA  
 29701 ACAGCATGAT TTATAATCCT TTGGGTATAT ACCAGTAAT GGGATGGCTG  
 29751 GGTCAAATGG TATTTCTAGT TCTAGATCCC TGAGGAATCA CCACACTGTT  
 29801 TTATTCTTT CTCCCTGCCTG CGAGCTCCTC CTGGTACCTC TGATAGAATT  
 29851 CAGCTGTGAA TATGTCTGGT CTGGCCTTT TCTTGCTTGG TACACTATT  
 29901 ATTATTGCCT CAATTCAGA GCCTGTTATT GGTCTATTCA GGGATTCAAC  
 29951 TTCTCCTGG TTTAGTCTTG GGAGGTTGTA TGTGTCCAGG AATTCTCTA  
 30001 TTCTCTCTAG ATTTTCTAAT TTATTGTTG AGAAGTGTGTT ATAGTATTCT  
 30051 CTGATGGTAG TTTGTATTTC CGTGGGATTG GTGGTGATAC CCCCTTATC  
 30101 ATTCTTATTA CATCTATTG ATTCTCTCT CTTTCTTCC TTATTAGTCT  
 30151 GCTAGTGGTC TATCAATTTC GTTGATCTT TCAAAAAACC AATTCTAGA  
 30201 TTCATTGATT TTTGAAAGTT TTTTTTTTG TGTCTCTGTC GCCTTCAGTT  
 30251 CTGGTCTGAT CTTAGTTATT TCTTGCCTTC TGCTAGCTT TGAATGTT  
 30301 TGCTCTGGCT TCTCCAGTTC TTTTAATTGT GATGTTAGGG TGTCGATTT  
 30351 CAGTCTTCC TGCTTTCTCT TGTGGCATT TAGTGCATA AATTCTCCTC  
 30401 TACACACTGC TTTGAATGT TCCCAGAGAT TCTGGTATGT TGTGTCTTG  
 30451 TTCTCGTTGG TTTCAAAGAA CATCTTATT TCTGCCTTCA TTTCATTATG  
 30501 TACCCAGTAG TCATTCAGGA GCAGGTTGTT CAGTTCCAT GTAGTTGTC  
 30551 AGTTTGAAT GAGTTTCTTA ATTCTGAGTT CCAATTGAT TGCACATGG  
 30601 TCTGAGAGAG TTTGTTGTGA TTTCTGTTCT TTTACATTG CTGAGGAGTG  
 30651 CCTTACTTCC AACTAAGTGG TTAATTGG AGTAAGTGCA ATGTGGTGT  
 30701 GAGAAGAAAG TATATTCTGT TAATTGGG TGAGAGTTG TGTATGTC  
 30751 TATTAAGTCC ACTTGGTCA GAGCTGAGTT CAAGTCCTGG ATATCCTG  
 30801 TAACCTTCTG TCTCATTGAT CTAATATTGA CAGTGGAGTG TTAAGGTCTC  
 30851 CCATTATTGT CTCCCATTAT TATTGTTGG GAGTCTAAGT CTCTTTG  
 30901 GTTTCTAAGG ACTCGTTTA TGGATCTGGG TGCTCTGTA TTGGGTGCAT  
 30951 ATATATTCTAG GATAGTTAGC TCTTGTGTT GAATTGATCC CTTTACCA  
 31001 ATGTTAACGG CCTTCTTTGT CTCTTTGAT CTGGTTGGT TTAAAGTCTG  
 31051 TTTTAGCAGA GACTAGGATA GCAACCCCCG GTTTTTTGCA TTTCCATTG  
 31101 CTTGGTAGAT CTTCTCCCAT CCCTTATTG TGAGCCTATG TGTGTCTG  
 31151 CATGTGAGAT GGGTCTCTG AATACAGCAC ACTGATGGGT CTTGACTCTT  
 31201 TATCCAATTG GCCAGTCTGT GTCTTTAAT TGGGGCTTTT AGCCCCATT  
 31251 CATTGAAGGT TAATATTGTT ATGTTGAAT TTGATCCTGT CATCATGATG  
 31301 TTAGCTGGTT ATTTGCTCA TTAGTTGATG CAGTTCTTC ATAGCATCGA  
 31351 TGGTCTTAC AATTGGCCT ATTTTGCAG TGGCTGGTAC TGGTTGTTCC  
 31401 TTTCATGTT TAGTTCTCC TTCAGGAGCT CTTGTAAGGC AGGCCTGGTG  
 31451 GTGACAAAAT CTCTCAGCAT TTGCTTGTCT GTAAAGGATT TTATTCTCC

FIGURE 3J

31501 TTCACTTATG AAGCTTAGTT TGGCTGGATA TGAAATTCTG GGTTAAAAAT  
 31551 TCTTTTCTTT AAGCATGTTG AATATCGGCC CCCTCTCTCT TCTGGCTTGT  
 31601 AGTGTTCCTG CTGAGAGATC TGCTGTTAGT CTGATGGGCT TCCCTTGTG  
 31651 GGTAAACCGA CCTTTCTCTC TGGCTGCCCT TACCACTTTT TCCCTCATTT  
 31701 CAACCTTGGT GAATCTGACA ATTATGTGTC TTGGGATTCC CCTTCTGGAG  
 31751 GAGTATCTT GTGGCGTTCT GTGTATTTCC TGAATTGAA TGTTGGCTG  
 31801 CCTTGCTAGG TTGGGGAAAGT TCTCCTGCAT AATATCCTGA AGAGTGTGTT  
 31851 CCAACTTGGT TCCATTCTCC CCGTCACCTT CAGGTACACC AATGAAACGT  
 31901 AGATTTGGTC TTTTCACATA GTCCCATATT TCTTGGAGAC TTTGTTCAT  
 31951 TCTTTTACT CTTTTGTCTC TAAACCTCTC TTCTCACTTC ATTCATTC  
 32001 TTTGATCTTC AATCTCTGAT ACCCTTCTT CCAGTTGATC GAGTCAGCTA  
 32051 CTGAAGCTTG TGCATTGTC ACGTATTCTC CATGCCATGG TTTTCAGCTC  
 32101 CATCAGGTCA TTTAAGATCT TCTCTATGCT GGTATTGGA ATTAGCCATT  
 32151 TGTCTAATCG TTTTCCAGG TTTTAGCTT CTTTGAGATG GGTCGAACA  
 32201 CCCTCCCTTA GCTCGGGAGAA GTTGGTATT ACCAATCTTC TGAAGCCTAC  
 32251 TTCTGTCAAC TCATTAAAGT CATTCTCCAT CCAGCTTTCT TCCCTTGTG  
 32301 GCGAGGAGCT GCGATCCTT GGAGAAGAGT CGCTCTGATT TTTAAATT  
 32351 TTGGCTTTTC TACTCTGTT TCTCCGCATC TTTGTGGTTT TATCAAACCT  
 32401 TGGCTTTGA TGATGGTAC CTACAGATGG GTTGGTGTG TGGATGTCCT  
 32451 TTTTGTGAT GTTGTGCTA GTTGGTGTG TGCTTGTGTTA GTTTTCCTTC  
 32501 TAACATTCA GACCCTCAGC TGCAGGTCTT TTGGAGTTG CTGGAGGTCT  
 32551 ACTCCAGACG CTGTTGCTT GGGTGTCAAC AGCAGAGGCT GCAGAACAAAC  
 32601 AAATATTGCA GAACGGCAAA TGTTGCTGCC TGATCCTTCC TCTGGAACCT  
 32651 TCATCTCAGA GGGGCACCTG GCTGTATGAC GTGTCAGTCG GCCCCTACTG  
 32701 GGAGGTGCTC CCCACTGGC TACTCAGGGG TCAGGGACCC ACTTGAGGAG  
 32751 GCAGTCTGTC CATTCCCAGA TCTCAGACTC TGTGCTGGG GGACCACTGC  
 32801 TCTCTTCAAA CGTGTCAAGAC AGGGACGTTT AAGTCTGCAG GTTTCTGCTG  
 32851 CCTTTGTTA AGTTATGCC TGCCCCAGA AGTGGAGTCT ACAGAGGCAG  
 32901 GCAGGCCTGG TTGAGCTCTG GTGGGCTCCA CCCAGTTGAA GCTTCTGGC  
 32951 CGCTCGTTT ACCTAGTCAA GCCTCAGCAA TGGCAGACGC CCCTCCCCA  
 33001 GTCTGGGGC CGTCTTGCAAG TTTGATCTC GACTGCTGTG CTAGCAGTAA  
 33051 GCAAGGCTCC ATAGGTGTGG GAACCCGGAA GCCAGGCACG GGTTATAATC  
 33101 TCCCTGGTGTG CCGTTGCTA AGACCATTTGG AAAAGCGCAG TATTAGGGCG  
 33151 GGAGGTGCCC GAGTTTCCAG GTACCATCTG TCACGGCTTC CCTTGGCTAG  
 33201 GAAAGGGAAT TCCCTGACCC CTTGTGCTTC CAGGGTGAGG TGATGCCCG  
 33251 CCCTACTTTG GCTCACACTC CATGGCCTGC ACCCACTGTC CAACAAGTCC  
 33301 CAGTAAGATG AACCCAGTAC CTTAGTTGGA AATGCAGAAA TCTCCTGTCT  
 33351 TCTGCGTCAC TCACGCAAGT GCATGAGCTG TAGACTAGAG CTGTTCTCT  
 33401 TCGGCCATCT TGTAACGATC CTGCTAGGGT TTTTCAAGG ATAGTTGGC  
 33451 AGGGAGAGAG ATGACAAAGG AATGAGTGCT GCTGATTGGT TGGCGGTGCA  
 33501 ATCACAGAGG TGTGGGAAAT GATCCTTATG CTGAGTCCAC TTCTGGCGA  
 33551 AGGCCGCAAG ACTGGTTGGC AGGTCAAGTG GTGCCATCTG GTTGTCAAGA  
 33601 TTGCAAAAGC CTGAAAGAC ATCTCAAAG GCCAACCTCA GGATCTATAA  
 33651 TAGTGTATT ACCTGCAGGA GTAATTGAGG AAGTTGCGAA TCTTGTGATT  
 33701 TGCAGAATAA TGACTGGTAA TTGTTCACAT CTATGTCTTA GTAGAATTGA  
 33751 GGCTCCTCTC ATTCTCCCAT TCTGGTGGTC TTTCATTAGT TTTACGAAAG  
 33801 TAGTTTAGTT TGGGGGAAGG GCTATTATCA TTTAAACTAC AAACTAAATT  
 33851 TCTTCAAAG TTAGCTTGAC CCAATCCAG GAATGACTAA GGGCATTGG  
 33901 AGGGTAAAGG CAAGATGCA GCTGGTTGGA TCAGATCTCC TTCACTGTCA  
 33951 TAATTTCTC ACTGTTTTAA GTTTGCAAG GGTGGTTGCA TAGGGTTTAT  
 34001 TTCTGGGCTC TCTATTCTAG TCCATTGGTC TATATTCTG TCTTTATGCC  
 34051 AGTACACAT TGCTTTGATT AATGTAGCTT GTTATAAGT TTTGAAATTG  
 34101 GAAAGTGTGA CTTACTTATT CTTTCAAGA TTCTTTGGC TATTCAAGGT  
 34151 GCCTTGAGAT TCCATGTGAA TTTAAAGATG TATTATTCTT CTGTTACTGC  
 34201 AAAAACATC ATTGGGATT TGATAGAGAT TGCAATTGACT CTGTAGATCT  
 34251 TCTTTAGTAG TTTTGACATT TAGCAATATT AACTCTTCCA ATCCATAAAT  
 34301 ATGGAATTTC TTCCATTAA TCTTTGTGGT CTTTAATTTC TTTCACCAAGT  
 34351 GTTTCATAGT TTTAGTGTAA TATGGTTTTT GCCTCCTTGG TTAAGTTTAT  
 34401 TTATGATTAA TTATGCTGGT AGGTTTATT TTTAAATT TGGGGGAAGT  
 34451 GTTTTATTAA TACAAATGTA TGGGTTACAA GTGCAATTTC GTTACATGTA  
 34501 TAGATTGTAT AGTGGTGTATC TCAGGACTTT TATGGTATCC ATCACTCAAA  
 34551 TAACTTCCAT TGTACCCATT AAGTACACCC CACTCCCACC TGTTAAGTTT  
 34601 TAATAAGTTG GTTGTGCTC TGTTCTGTCT CTGAAAAATG TCAGATACTA

FIGURE 3K

34651 CTAACAGAAC TAAAAAATCC AGGACTGAGA GAAACTTAA GTACATACAA  
 34701 CAATATAAAC AGATCTTAA AATATGATAC AGCATAGAAA AATGAAACC  
 34751 AAACATATTG CACAATGTCA TTCAGTACTT TAAATTACT ACACAGAAAG  
 34801 TGTATACAT TTCACAAAAA TGTATAAGAA TAGCACACAC AAATTATCAA  
 34851 CAAAATAATA CAGGGTTTC TGAATTGTCT ACCTGTGAGA TGTTTCTAAG  
 34901 CAGGGTTTA TTATTGATTG ATTGATTGAG ACAGGGTCTG ACTCTGTCGC  
 34951 CCAGATTGGA GTACAGTGGT GCAATCCTGG CTTGACCTCC TGGCTCAAGT  
 35001 AATCCCTCCA CCTCAGCATC CCAAGCAGCT GGGACTATAG GTTCACACAA  
 35051 CCATGCCCTGG CTACTTCTTT AAAAAAATT TTGTAGAGAG TCTCACTACA  
 35101 CTGCTCAGGT GGTCTCAAGC TCTTGGCTC AAGCAATTCT GACACCTCAG  
 35151 CCTCCCAAAG TGCAGGGATT ACGGGTGTGA GCCGTTGCAC CTGGACTAAG  
 35201 CAGGGTTTA AGTGAATTGG TTCTTGTAA TGTGACACT AAACATGCAT  
 35251 CAAAGATTAA CCTTCTAAAT TCTGGAACAC AGAAAAGAAG GCAGCCCTTA  
 35301 TTTCAGGGCT GGGCTGATGA TAGAATTTC TTGATGCAGT TTTTCATAGA  
 35351 AAGATATGTG TCTTTTGT TTAAACATAT AAGAAAAGAG TTTCCACTGT  
 35401 TTACCTGGTA CTAGGTCCCA ATGTCTAAC CAAGTTGGA GAATCACATC  
 35451 CTCTGAGCAG CCTATGTTGA TGATGATGCT GATGACAATG ATGACAGAAG  
 35501 ACACCTATAT GGTACTTATT TATGTAGCAG AACCATAGTC CTTTATATGT  
 35551 TTTAACTCAT TTAATATTCA AAACAACCT ATGACATGGT ACATTGATGT  
 35601 TGTATACCC ATTTATATGT GTGGAATGG TCATACAGTG TCTTATTAAT  
 35651 TTGCCTGAGG CCACACAGCT AATTAGTGGT GGATCTGAGG TTGGATTCT  
 35701 AGGAGCCAGA TTCACAAATC CAACACTGCA CTTGCTTTT TCTCTATTGT  
 35751 CTATCGCTCA TTGATTTTT TATTCTCAAT TTTATTTCTC TCCCTTATTT  
 35801 TTGGTTAAAT TTCTCTTCTC TTTTTAGTT TCTTGAGATG AAAACTTAGA  
 35851 TCTTGATTT TTCTACCTCT CTTCTTTCA ATATTTATTA TGCTTAAAGC  
 35901 TTTACACTTC ACCCTAGGCA TTGTTTTGT TGCACTCCAC ATATTTGAT  
 35951 GCTGTATTTT TATATTCA ATATTTCTA ATTATATTT ATTGTTCAT  
 36001 TTTAAAAATA ATTTTACTAA ATAATATAAA ATGCTAATT TGAAATACCT  
 36051 AGGATTTCT TACATTTGGT TTGATTCTC AATTAAATTC TATGTGGTTT  
 36101 TAAATATAG TTTCACTCAA TTGAAATTAA TTGATTACT TTATATTCT  
 36151 GCATATGGTT GATACTGGTG CATGTTGCAT GTACACTTAA ATAACATTTA  
 36201 TTCTCGGATT GTTGGATACA GTGTTCTATA TTTGTCATT AGATTGAGTG  
 36251 CTGCTCAGAT GTTCTATATT CCTACAGATA TTTCATGTGC TTATTCTATA  
 36301 AAATACAAAT TGTAAATGTT TCTGATTAGG ACTAGAAGAC TTTTCTTTA  
 36351 CCTTTAAAT ATATTTTTA TTTTATGTT TTTGAAACTA TGTTATTG  
 36401 TGCCTATACA CTTAGATTTT TTTCTGAGG ATTGATCCT TTATCATTAT  
 36451 GAAATATCCT TCAGGCACCC CGCTCCACA GATGTATGCA TCTGCTGTA  
 36501 CCCCTGCTTC TGCTGGCACA AATGCACAGG CATGGATCCT GCTGCCACCA  
 36551 CCTTGATGAA GTGTGTGGCC AGCACCCCCA TCAGAGTACT GTTACAGCA  
 36601 TACTGGGAAT ACCTTGGCCC CAGAGTGCAG CAGCTTCTA ACCTCTATGG  
 36651 GGCAGAGAAC AAAGTTGGGG GGCCCAGTAC CAGCCCATCA GCGTTACATC  
 36701 ACATAGCCC TGAGTGTGAG GCTGAGCCTT GGTGCCCTGA AAGCATCCAG  
 36751 AATGAAGCCA GTCAACTGAA CCGACATTAT ACCACAATCA AACCTCAAG  
 36801 AATATCAAAG AATATAAAAG TAAAAAGCCC TATCCAAAGG ATAGCAACTT  
 36851 CAAAGATTAA AGGAATGTCA GCCCACACAG ATGAGAAAGA ATCAATGCAA  
 36901 GAACTCTGGC AATTCAAAAA ACTAGAGTGC CTTCTTACCT CCAGACAACC  
 36951 CCACTGGTTC CCTAGCAATG GTTCTTAACA AAACTGAAAT GACAGAGATA  
 37001 GAATTGAGAA TCTGGATAGA AAAAGATCA TTGAGATTCA GGAGAAAGTT  
 37051 GAAACCCAAT CCAAGGAATC TAAGGAATCC AATAAAACAA TACAAGAGAT  
 37101 GAAACGAAAT AGCCATTAA AGAAAAGAAC AACTGAACT GATAGAGCTG  
 37151 AAAAACTCAC TACAAGAATT TCATAATGCA ATCACAAGCA TTGTTAACAT  
 37201 CAGAATAGAC TACTAACATC AGAATAGACC AAGCTGAGGA AAGAATCTCA  
 37251 GAGCTTGAAG ACTGGTTCCCT CAAATCAACT CAGACAAAAA TAATGAACAA  
 37301 ATAATTTAAAG AGAGTGAACA AAACCACTGA GAAATATGAG ATTAGGTAGA  
 37351 GACCAAATCT GTGACTCATT GACATCCCTG AAAGAGAGAG AGAAAAGCA  
 37401 ATTTTCCAG CTTGCTAGA GAGGCCAAA TTCAATTCA GGAAATGCAG  
 37451 AAAACCCCTG TGAGATACTA TACAAGACAA CCATCCCCAA GACATGTAGG  
 37501 CATCAGATTG TCCAACGTCA ACATCAAAGA AAAAATACTA AGGCAGCTAG  
 37551 AGAAAAGGGG CAGGTACCT ACACAGGGAT TCCGATGAGG CTAACAGAAG  
 37601 ACCTTTCAGC AAAAGCACTA CAAGCCAGGA GAGATTGGA GACCTATGTT  
 37651 CAGCAAAAAA AATTCCAACC AAGTATTTC TGTCAGCAA GACTAAGCTT  
 37701 AATAAGCAA GGAGAAACAA GATCCTTTTC AGACAAGCAA ATGCTAAGAG  
 37751 AATTCAATTAC CACCAAGACAT GCCTACAAG AGGTCCCTAA GTGAGTGCCA

FIGURE 3L

37801 AATATGGAAA CAAAAGACTG TTACTGGCCA CCACAAAAAT ATACTTAAGG  
 37851 ACTAGACCTC TGAACACTAT AAAGCAATT ACGTATCAAG TCTGCATAAT  
 37901 ATCCAGCTGA CATCATGATG ACAGGATCAA ATCAACACAT ATAAGTATTA  
 37951 TCCTTAAAAG TAAACATGCA AAATGCCGA CTAAAAGT ACAGAATGGC  
 38001 AAATTGATA AAGAAATAAG ACACATGGAG AGTTGCTCCA AATGGCAGGA  
 38051 TAGGAACAGT TCTGGTCTAC AGCTCCAGC AAGATCAATG CAGAAGACAG  
 38101 GTAATTCTG CATTTCACAC TGAGGTACCT GGTTCATCTC ATTGGGATTG  
 38151 GTTGGACAGT GGGTGCAGCC CATGGAGGGC AAGCGAAGC AGGGCGGTGC  
 38201 ATCCCTCACC GAGGAAGTGC AAGGGGTCAG GGGATTTCCC TTTCTATCC  
 38251 AAGGAAAGCC ATGAGTGACT GTACCTAGAG GAAAAGTACA CTCCTGCTCA  
 38301 AATACTGCAC TTTTCCCACG GTATTGCAA CAGGCAGACCC GGAAGATTCC  
 38351 CTCCCATGCC TGCTCGGTGG GTCCCAAGCT CATGGTGCCT TGCTCACTGC  
 38401 TAGCACAGCA GTCTGAGATC GACCTGGGAT GCTGGAGCTT GGTGGGTGGG  
 38451 GAGCGCGTC CACCATTGCT GAGGCTTGAG TAAGCGGTTT TATGCTCACA  
 38501 GCGTAAACAA AGCAGCAGGG AAGCTTGAAC TGACCGGAGC CCACTGCAGC  
 38551 TCAGCAAGGC CTACTGCCTC TGTAGATTCT ACCTCGGGGG CAGGGCATAT  
 38601 CTGAAAAAAA TGCCGCAGAC AGCTTCTGCA GACTTAAACA TCCCTGCCTG  
 38651 ACAGCTCTGA AGAAAGCAGT GGTTCTCCCA GCACGGGGGC GTTCAAGCTC  
 38701 TGATAACGGA CAGACTACCT CCTCAAGTGG GTCCCTGACC CCTGTGTAGC  
 38751 CTGATTGGGG GATACTCTCC AGTAGGGGCC AACAGACATC TCATACAGGC  
 38801 GGGTGCCTCT CTAGGACGAA GCTTCCAGAG GAAGGATCAG GCAGCAATAT  
 38851 CTGCTGTTCT GCAGCCTCCA TTGGTGATAC CGAGGCAAAC GGTCTGGAGT  
 38901 GGAACCTCCAG CAAACTCCAA CAGACCTGCA GCTGAGGGGA CTGCTGTTA  
 38951 GAAGGAAAAC TAACAAAGAG GAATAGCATC AACATCAGCA AAAAGGACAT  
 39001 CCACACGAAA ACCCCATCCG TAGGTACCCA ACATCAAAGA CCAAAGGTAG  
 39051 ATAAAACAC AAAGATGGGG AGAAACCGAGA GAAGAAAGGC TGAAAATTCC  
 39101 AAAACCGAA CGCCCTTTCTT CTCCAAGGAT CACAACCTCT CGCCAGCAAG  
 39151 GGAACAAAAC TGGACAGAGA ATGAATTGTA TGAGTTGACA GAAGTAGGCT  
 39201 TCAGAAGGTC GTATAAACA AACTTCTCCA AGCTAAAGGA GCATGTTCTA  
 39251 ACCATCGCG AGGAAGCTAA AAACCTTGAA AAAATGCTAG ATGAATGGCT  
 39301 AACTAGAATA CAATAACCAAG TGTAGAGAAG AATATAATG ACATGATAGA  
 39351 GCTTAAACACC ATAGTACAAG AACTTTATG AACATACACA AGCTTCATA  
 39401 GCTGATTCAA TCAAGCGAA GAAAGGATAT CAGTGATTGA AGATCAAATT  
 39451 AATGAAATAA AGCAAGAAGA CAAGATTAGA GAAAAAAGAG TGAAAAGAAA  
 39501 CGAATAAAAGC CTCCAAGAAA TACGGGACTA TGTGAAAAGA CAAATCTAC  
 39551 GTTTGATTGG TGTACCTGAA AGTGACAGGG AGAATGGAAC CAGGTTATAA  
 39601 AACACTTTCA GGATATTATG CAGGAGAACT TCCCCAACCT AGCAAGGCAG  
 39651 GCCAACATTCA AAATTCAAGGA AAGACAGAGA ACACCCACAAA GATACTCCTC  
 39701 GAGAAGAGCA ACCCCAAAGAC ACATAATTGT CAGATTCAAC AAGGTTGAAA  
 39751 TGAAGGAAAA AATGTTAAGG GCAGCCAGAG AGAAAGGTCG GGTTACCCAC  
 39801 AAAGGGAAGC CCATCAGACT AACAGCAGAT CTCTCAGCAG AAACACTACA  
 39851 AGCCAGAAGA GAGAGGGGGC CGATATTCAA CATGCTTAAA GAAAAGAATT  
 39901 TTTAACCCAG AATTTCATAT CCAGCCAAAC TAAGCTTCAT AAGTGAAGGA  
 39951 GAAATAAAAT CCTTTACAGA CAAGCAAATG CTGAGAGATT TTGTCACCAC  
 40001 CAGGCCTGCC TTACAAAAGC TCCTGAAGGA AGAACTAAAC ATGGAAAGGA  
 40051 ACAACCGGTA CCAGCCACTA CAAAAACATG ACAAATTGTA AAGACCATCG  
 40101 ATGCTATGAA GAAACTGCAT CAATTGATGG GCAAAATAAC CAGCTAACAT  
 40151 CATAATGACA GGATCAAATT CACACATAAC AATATTAACC TTCAATGTAA  
 40201 GTGGGCTAAA TGCCCCAATT AAAAGACACA GACTGGCAA TTGGATAAAG  
 40251 AGTCAAGACC CTTGACTGTG TTCAGGAGAC CTATCTCACA TGCAAAGACA  
 40301 CACATAGGCT CAAATAAAAGT GATGGAGAGA GATCTACCAA GCAAATGGAA  
 40351 AGCAAAAAAA AGGGTTTGC ATCCTGGTCT CTGATGAAAC AGACTTTAAA  
 40401 GCAACAAAGA TCAAAAGAGA CAAAGAAGGC CGTTAACATA ATGGTAAAGG  
 40451 GATCAATTCA ACAAAAGAG CTAACATATCC TAAATATATA TGCAACCCAAAT  
 40501 ACAGGAGCAC CCAGATTCAAT AAAGCAAGTT CTTAGAGACT AAGTCTACAA  
 40551 AGAGACTTAG ACTCCACAC AATAATAATG GGAGACTTTA ACACCCCACT  
 40601 GTCAATATTA GATGGATCAA CGAGACAGAA AGTTAACAG GATATCCAGG  
 40651 ACTTGAACCTC AGCTCTAGAG CAAGCAGAAC TAATAGACAT CTACAGAACT  
 40701 CTTCTTCCCA AATCAACAGA ATATACATTG TCCTCAGGCC CACATCACAC  
 40751 TTATTCTAAA ATTGACCACA TAATTGGAAG CAAACACTG CTCAGCAAAT  
 40801 ATAAAAGAAC AGAAATTACA TCAAACGTG TCTCAGACCG CAATGCAATC  
 40851 AAATTAGAAC TCAGGATTAA GAAACTCACT CAAACTGCA CAACTGCATG  
 40901 GAAACTGAAC AACCTGCTCC TGAATGACTA CTGGGTAAAT AACGAAATGA

FIGURE 3M

40951 AGGCATAAAT ACAAATGTT TGTGAAGCCA ATAAGAACAA AGATACAACG  
 41001 TTCAAGAATC TCTGAGAAAC ATTTAAAGCA GTGTGTAGAG AGAAATTAC  
 41051 AGCACTAAGT GTCCACAGGA GAAAACAGGA AAGATCTAA ATCGACACCC  
 41101 TAACATTGCA ATTATAAAAG AACTACAGAA GCAAGAGCAA ATGAATTCAA  
 41151 AAGCTAGCAG AAGACAAGAA ATAAATCAGA GCAGAACTAA AGGAGAGAGA  
 41201 GACACAAAAA ACCCTTTAAA AAAATCAATG AACCCAGGAG CTGGTTTCT  
 41251 GAAAAGAGCA ACAAAATAAT TACATGACAA GCAAGACTAA TAAGGAAGAA  
 41301 AAGAGAGAAG AATCAAATAG ACGCAAAAAA AAATGATAAA GGGGATATCA  
 41351 CCACCGATCC CACGGAAATA CAAACTATCA TCAGACAATA CTATAAACAC  
 41401 CTCTACGCAA ATAAAATAGA AAATCTAGAA GAAATGGAAA AATTCTTGA  
 41451 CACATACACC CTCCCAAGAC TAAACCAGGA AGAAGTTGAA TCTCTAAATA  
 41501 GTTCAGTGAC AGCTTCTGAA ATTGAGGCAA TAATTAATAG CCAACCAACC  
 41551 AAAAAAAGTC CAGGACCAGA CAGACTCACA GCCAAATTCT ACCAGGGCA  
 41601 CAAAGAGGAG CTAGTACCAT TCCCTCTGAA ACTATTCCAA TCAATAGAAA  
 41651 AAGAGGGAAT CTTCCCTAAC TCATTTTATA AGGCCAACAT CATCCTGATA  
 41701 ACAAAAGCTC ACAGAGACAC AACAAAAAAA GATATTTTA GGCCAACATC  
 41751 CCTGATGAAC ATCGATATGA AAATTTCAA AAAAAAATAC TGGCAAACCG  
 41801 AATCCAGCAG CCCATCAAA AGCTTATCCA CTACGATCAA GTCGACTTCA  
 41851 TCCCTGGGAT GGAAGGCTGG TTCAACATAG GCAAATCAAT AAATGTAATC  
 41901 CATCACATAA ACAGAACCAA CGACAAAAAC CACATGATTA TCTCAATACA  
 41951 TGCAGCAAAG GCCTTCAACA AAATTCAACA GCCTTCTATG CTAAAAACTC  
 42001 TCAATAAACT AGGTATTGAT AGAATGTATC TCAAAACAGT AAGAGTTATT  
 42051 TATGACACAC CCACAGCCAA TATACTGAAT GGGCAAAAAC TGGAAGCATT  
 42101 CCCTTTGAAA ACTGGCACAA GACAAGGATG CTCTCTCTCA CCACTCCAT  
 42151 TCAACATCGT GTTGGAAAGTT CTGGCCAGGG CAATAAGGCA AGAGAAATAA  
 42201 ATAAATGGTA TTCAATTAGG AAAAGAGGAA GTCAAATAGT CTGTTTGTAG  
 42251 ATGACATGAT TATATATGTA GAAAACCTCA TCGTCTCAGC TCCAAATCTC  
 42301 CTTAAGCTGA TAAACAACTT CAGCAAAGTA TCAGGATACA AAATCAATGT  
 42351 ACAAAATCA CAAGCATTCC TATCCACCAA GAACAGACAA ACAGAGAGCC  
 42401 AAATCATGAG TGAACTCCCA TTCCCAACTG CCTCAAAGAG AATAAAATAC  
 42451 CTAGGAATCC AACTTACAAG GGATGTGAAG GACCTCTTCA AGGAGAACTA  
 42501 CAAACCACTG CTCATGAAA TAAAAGAGGA TACAAACAAA TGGAAGAACAA  
 42551 TTCCATGCTC ATGGATAGGG AGAATCACTA TCATGAAAAT GGCCATACTG  
 42601 CCCAAGGTAA TTTAAAGATT CAATGCTATC CCTATCAAGC TATCACTGAC  
 42651 TTCACAGAAT TGGAAAAAAA CTACTTTAA GCTCATATGG AACCAAAAAA  
 42701 GAGCCCACAT AGCCAAGACA ATCCTGGCA AAAAGAACAA AGCTGGAGGC  
 42751 ATCACACTAC CTGACTTCAA ACTACACTAC AAGGCTACAG TAACCAAAAC  
 42801 AGCATGTTAC TGGTACCAAA ACAGACATGT AGACCAACCG AATAGAACAG  
 42851 AGGCCTCAGA AATAACACCA CACATCTACA ACCATCTGAT ATTTGACAAA  
 42901 CCTGACAAA ACAAATCGGG AAAGGATTCC CTATTTAATA AATGGTGTG  
 42951 GGAAAACAGG CTAGCCATAT GTAGAAAGCT GAAACTGGAT CCCTTCCTTA  
 43001 CACCTTATAC AAAAATTAAC TCAAGATGGA TAAAAGACTT GAATGTAATA  
 43051 CCTAAAACCA TAAAAACCCCT ACAAAAAAAC CTAGGCAATA CCCTTCAGTG  
 43101 CATAGGCATG GGCAAAGACT TTATGACTAA AACACCAAAA GCAGTGGCAA  
 43151 CAAAAGCCAA ATTGACAAA TGGCATCTAA TTAAACTAAA CAGCTTCTGC  
 43201 ACAGCAAAT AAACATACCAT CAGAGTGAAT AGGCAACCTA CAGAATGGGA  
 43251 GAAAAATTTC TCAATCTATC CATCTGACAA AGGGCTAATA TTCAGAATGT  
 43301 ACAAGAACCC TAAACAAATT TACAAGAAAA AAAAAACAC TGCACTAAAA  
 43351 AGTGGCAAA GGATATGAAC AGACACTTCT CAAAAGAAGA CAGTTATGCA  
 43401 GCCAACAGAC ATATGAAAAA ATGTCCATCA TCACTGGTCA TCAGAGAAAT  
 43451 GCAAGTCAAA ACCACAATGA GATACCATCT CATGCCAGTT AGAATGGCGA  
 43501 TCAATTAAAAA GCCCAGGAAAC CACAGATGCT GGAGAGGATG TGGAGAAATA  
 43551 GGAACACTTT TACACTGTT GTGGGAGTGT AAATTAGTGC AACCATTGTG  
 43601 GAAGACAGTG TGGCGATTCC TCAAGGATCT ACAACTATAA ATACCATTTG  
 43651 ACCCAGCAAT CCCATTGTTG GGTATATACC CAAAGGATTA TAAAGCATT  
 43701 TACTATAAGG ACACATGCAC ACATATGTT ATTGCAGCAC TATTTACAAT  
 43751 AGCAAAGACT TGGAAACCAAC CCAGATGTCC ATCAATAATA GACTGGATAT  
 43801 ATAGTATTCT ATGTCTGGTT AAAAAAAAG TTATTCATT TTATGGATTT  
 43851 GGATTAGGAT CATTCCCATT TCTGTAAATA TTTACACCTA TAAGGATATC  
 43901 AAGAAGGAAT GTCAGGCAGT TTACTAGTAA CTTTCAAAG TCTTAGAAAA  
 43951 GTTGCAATTTC TTGCTGGCAC CAAGAGGGGA AAACATCATA AAAATAGTTT  
 44001 CAAAATCTAC AATCAATGCT TTCTCCAAA TAAATGTCTT TGTTAAAAAA  
 44051 AATAATAATA ATAGACTGGA TAAAGAAAAT GTGGCACATA TATACCATGG

FIGURE 3N

44101 AATACTATGC AGCCATAAAA AAGGATGAGT TCATATCCTT TGTAGGTACA  
44151 TGGATGAAGC TGGAAATCAT CGTTCTCAGC AAACATATCAC AAGGACAGAA  
44201 AACCAAACAC CGCATGTTCT CACTCATAAG TGGGAGCTGA ACTATGGGAA  
44251 CACGTGGACA CAGAGAGGGG AACATCACAC ACCGGGGCCT GTCAGAGGGT  
44301 GGGGACTGG GGGAGAGGTA GTGTTAGGAG AAATACCTAA TGTAAATGAC  
44351 GAGTTGATGG GTGCAGCATA CCAGCATGGC ACATGTATAA CCACGTAACA  
44401 AACCTGCATG TTGTCACAT GTACCCCTGA ATTAAAGTA TAATTTAAA  
44451 AAAGAAGAAG AAATAAGTC CAATTGTATG CTGCTTCAA GAGACCCATC  
44501 TCATGCAGAG CTACCCATAG GCTAAATAA AAGGTTAAA GAAAAATCTA  
44551 CCAAGTAAAT GGGAAAAGAA AACAGGAGTT ACTATTCTAA TTTTAGACAA  
44601 AGCAGACTTT AAAGCAACAA TGATCAAAAA AGACAAGCGC ATGACATAAT  
44651 CATAAAAGGGT TCAATTCAAC AAGAAGACTT AAATATCCTA AATATATGTA  
44701 CCCAACACAG GAGCTTGCAG ATTCAAGAA CAAATTCTTA GAGACCTACA  
44751 AAGAGACATG GATAACCACA CGGTAATATT GGGAGACTTC AGCACCCAC  
44801 TAACAGTATT CAATCATCAA GGCAGAACAC TAACAAAGAT ACTTGGGACC  
44851 TGAACTCAGT ATTTGACTAA ATGGACCCAA CAGACATCTA CAGAACTCTG  
44901 CACTCCAAAA CAACAGAATA TACATTCTTC TCATGCCAC ATGGCACATA  
44951 CTCTAAAGTC GACCACACAA TCGGCCATAA GTCAATTCTT AGCAAATTAA  
45001 AAACACAAGA ATCACACTAA CCACACTTT GGACCATGGC GCAACAAAAG  
45051 TAGAAATCAG CCCCAAGAAG ATCATTCAA ACATACAGCT ACATGCAAAT  
45101 CAAACAACCT GCTCCTGAAT GACTTTGGG TAAACAATGA AATTAAGGCA  
45151 GAAATCAAGA CATTTTTGAA AACTATTGAA AATAAAGATA AAATATAACGA  
45201 AAATATCTGA GACACAGCTA AAATAAAGAT AAAATATACC AAAATCTCTG  
45251 CGACACAGCT AAAGCAGTAT TAAGAGGGAA GTTATAGCA CTAAACACCC  
45301 CTATCaaaaa GTTAGAAAGA TCTCAAATTA ACAGCCTAAC ATTGCACCTA  
45351 GAGGAACACTAG AAAAACAAAG GCAAACCAAC TGCAAAGCTA GCAGAAGAAA  
45401 AGAACCAAAA CAAGAACACTGA ACTGAATGAA ATTGAGACAG GAAAATGATA  
45451 TAAAAGACCA GTGAAACCCAG AAGCTGGTTC TTTGAAACAA TAAATAAGAT  
45501 GGATAGACCA CTGATTATAC TAATCAAAAA ACAGAGCAGA TCCAAATAAA  
45551 CTTAATCAGA AATGACAAAG AGGACATTAC CATCAACCCA ACAGAAATAT  
45601 AAAAACCTT AAAAGACTAT TACAAACACC TCTATGCAGA CAAACTAAAA  
45651 AACCTACAAG AAACGATAAA TTCTTGAAA CATACTGCT CCCAAGACTG  
45701 AACAGGAAAG AAATTGAAAC CCTGAACAGA CCAATAACAA GTTCCAAAAT  
45751 TGAATCAGTA GTAAAAAGCC TACCAACCAA AAAAGCCCTG GACCAGATGG  
45801 ATCCACAAACC AAATTCTGCG AGATGTATAA AGAAGAGCTG GTACCATTCC  
45851 TACTGAAACT ATTCAAAAAA ATTAAGGAGG AGGGACCCCT CCCTAACTCA  
45901 TTCTATAAGG CCAGCATCAT CCTGATATAA GGCCAGCATC ATCCTGATAT  
45951 AAGGCCAGCT TCATCCTGAT AACGAAACT GGGAGAGACA ACATAAAAAG  
46001 AAAACCTCAA GTCAATATCC TGGACAAACA TAGATGCAA AATTCTCAAT  
46051 AAAATACTAG CAATCTGAAT TCAGCAGCAC ATCAAAAAAC TAATCCACCA  
46101 TGATCCAAGT AGGCTTTATA CTTGGCATGT GAGATTGGTT CACCATATAC  
46151 AAATCAATAA ATATGATTCA TCACATGAAC AGAACTAAAA AGAAAAACCA  
46201 AATGATAATC TCAATAGATG CAGATACATC TATTGAATGC AAAATTCACT  
46251 ACCCTTCAT GTTAGAAACC CTCAACAAAC TAGGCATCAA AGGAACATAC  
46301 CTCAAAATAA TAAGAGCTAT CTGTAAAAAA ATCACAGCCA GCATCATACT  
46351 GAAAGAGCAA AAGCTGGAAG CATTCCCTT GTGGAATAAG ACAAGGATGC  
46401 CCACTATCAC CACTCATATT CAATATACTA CTGGAAGTCC TAGGCAGAGC  
46451 AGTCAAGCAA GACAATAAA GAAAAGGCAT CCAAATAGGA AGAGAGGAAG  
46501 TCAGACAATA TGATTTTATA CCTAGAAAAT TCCATAGTGT CTGCCAAAAA  
46551 GCTCCTAGAT CTGACAAACA ACTTCAGCAA AGTGGAGTG TACAAAATCA  
46601 CTGTGCAAAA ATAAGTTGCA TTCCCTTACA CTAACAACAT CCAAGCTGAG  
46651 AGCCAATCAA GGACACAATC CCATTCTAA TAGCCACACA AAAAATAAAA  
46701 TACCTACGCA TACAGCTAAC CAGAGAGGCA AAATATTCT AGATTGAGAA  
46751 TTACAAAACA GTGCTGAAAG AAATCAGACA ACACAAACAA ACGAGAAAAC  
46801 ATTCAATTCCA TGCTCGTGG TAGGAAGAAT CAATGTTGTT AAAGTGGCCA  
46851 TACTGCCAA AGCAATTAC AGATTCAATG CTATTCTTT CAAACTACCA  
46901 GTGATATTTT TCACAGAATT AGAAAAAAACT ATTCTAAAT TCAGGTGGAA  
46951 CCAAAAAAGA GCCTGAATAG CCAAATCAAT CCTGAGCAA AAGAACAAAA  
47001 CTGGAGGCAT CACATTACCA AAATTCAAAC TGTACTGCAA GCTTACAGTA  
47051 ACAAACACAG CATGGTACTT GTACAAAAAC AGACACATAA ACCAATGGAA  
47101 TAGAGAGCCC AGAAATAAG CTGTGTACTC AGAACCATCT GATCTTGAC  
47151 AAAATTGACA AAAACAAACA ATGGGAAAG GACCTGCTAG TCAATAAGTG  
47201 ATTGGGATG GATCGCTACC CATATGCAGA AGATTTAAAC TAGACCACTT

FIGURE 30

47251 CCTATCACCA TATATAAAAT CAACTCAAGG ATGTATTAAA GACTTAACGT  
 47301 TAAAAACTAT AAAACCCCTAG AGGAAAACCT AGGAATACCC ATTCTGGACA  
 47351 TAGTCCCTGG CAAAGATTTC ATGATGAAGA TGCCAAAAGC AATTGCAACA  
 47401 AAAAACGGC AAGTGGGACC TAATTAAGA TCTTCTGCAC AACAAAAAGA  
 47451 AACTATCAAG AGAGTAAACA GACAACCTAT AGAATGGGAG AAAGTATTTG  
 47501 TAAAGTATGC ATCTGACAAA GGTCTAATAT CCAGAATCTA TAAGGAACCT  
 47551 AAACAAGTTT ACAAGAAAAA AAAATTGTTA AAGTAGCTAA AGTAAATGAA  
 47601 CAGACACTTT TCAAAAGATG ACATACATGT GACCAACAAG CATATGAAAA  
 47651 AATGCCAAC ATCACTAATC ATTAGAGAAA TACAAATTAA ACCACAGTG  
 47701 AGATACCATC TCACACCAGT CAGAATGGGT ATTATTAAGA AGTTATAAAA  
 47751 TAGCAGATGT TGACGAGGTT ATGGAGAAAA GGGATGCCT ATACGCTGCT  
 47801 GGTGGAAATG TAAATTAGTT CAGCCATTGT GGAAAACAGG GTGGCAATT  
 47851 CTCAAAGTAC TTAAAACAGA ACTACCATT TACCCAGCCA TCCACTTATT  
 47901 GGGTATATGC CCAAAGGAAT AGAAATCATT CTACCATAAA GACACATGCA  
 47951 CACACACGTT CATCGCAGCA CTATTACAG TAGGAAAGAC ATGGAACCAA  
 48001 CTTAAATTTC CATCACTGGT AGATTGGATA AAGAAAATGT GGTACATATA  
 48051 CACCATGTAA TACTACGTAA CCATAAAAAA AGAATAAGAT GATGTCCTT  
 48101 GCAGCAACAT GGATAGTGT GGAGGTCAAT ACTCTAACAGC AACTAATGTA  
 48151 GGAACAGAAA ACCAAATGCT GCATGTTCTA ACTTATAAGT GGAAGCTAAA  
 48201 CATTGAGAAC ACATGGATAC AAAGAAGGGA ATAATGGACA CTGGACCTAC  
 48251 TTGAGGGTGG AGGGTAGGAG GAGGATGAGG AGAGAAAAAA TGACCTAATA  
 48301 TGCTTATTAC CTGGGTGATG AAAATCTGTA CACCAACACC CCACAAACATG  
 48351 CAATTATTG ATAACAAACC TGCACATGGA CCCCTGAACC TAAAATAAAG  
 48401 TCTTAAAAAA AGAAGAGGGG CGGGGCACAG TGGCTCACGC CTGTAATCCC  
 48451 AGCACTTTGG AAGGCTGAGG CGGGTGGATC AGGAGGTCAG GAGATTGAGA  
 48501 CCATCCTGGC CAACACGGTG AAACCCCATC TCTACTAAAA ATACAAAAAA  
 48551 TTAGCCGGGT GTGGTGGTGG GCTTTTGCAG TCCAGCTAC TCGGGAGACT  
 48601 GAGGCAGGAG AATGGCATGA ACTCGGGAGG TGGAGCTTGC AGTGAGCTGA  
 48651 GATCATGCCA CTGCACTCCA GCCTGGGCAA CAAAGCAAGA CTCCGTCTCA  
 48701 AAAACAAAAG AAAACAAAAA AAACAAAGAG GAGGAAGAGG AAAATAAGGC  
 48751 CCATGGTGCT TAAAGTCACA CATGTGCCAA AGCCAGCTAG TAAACAAAGC  
 48801 AAAGATCTGA ATTCAAGATAT TTGTTTAACG GCTGTGGTTC TAATTATATC  
 48851 ACGCACCTTG GACTCAAAGC AGGATAGAGA AGGTTGGCA GTGGATCACA  
 48901 AAAGATATCA GCATAAAATAC ACATCATTAA TTCTGTATTAA TCTGATGCCA  
 48951 AGCAGTGTGC TAAGCACTTT ACATACATCA TCTTATTGT ACATCCAAT  
 49001 TACCTCTGA TACAGCTGTC AATTCCCACT TTTATCAGGA AACTGAGGAT  
 49051 CAAAGAGGGT AAGTAATACA TCCAGAGTTA CAAAGCTGTT AAAAATATTA  
 49101 GAGGGCTGTA CTCCAGTGT AATATTAA AAAGCCCCCTT ATTATCTCTG  
 49151 GTAATCACTG TCTTGAAAC TACTTTGTCT GATATTAAATA AAGCCACAGT  
 49201 AGCTTCATA CACCTCTTG TTTACATATG ATTTCCATA TTCTTTATC  
 49251 CCATCTATGT TATTAAAATG TGTCTTGTCA ATAGTATATA GTTTGTTCTT  
 49301 GTTTCTTAT TCATTTGTGTT TTCCGTGATAC TCTTTCCCA ATTAAGGAGG  
 49351 TAATAATCTG TAAGCAAAGC CTTATTACA TAAACACTGC TGTGATCTTA  
 49401 TACCAAATAA ACAGCCCTAG CATGTGTGTG TGTGTGTGAG AGAGAGAGAG  
 49451 TGTGTGAATG TGTGTGTGTT TGGGCTTCT GAATTAGATT TTCTTTCAAG  
 49501 ATCCACCTAC ATCTTTACTT TTGGCCTAAG TAATGGTTGG TCATGTTAAC  
 49551 TGTGTAAAAT ATTAATCTTT TTCTGAAGCT ACAAAAGTC CATGTCTACT  
 49601 TACTGTTCTA GGAAAAGTTT TTTCAAATTG GGGAGGTGTC TACCTTTAA  
 49651 AATATTCTG GAGAGTGTGTT AATTACTTCT ATGATCTTAA AAGGTTCTCT  
 49701 CCATTTACTT TTTATCCAGC TGTCACATAT TCTGAGTATG TTTTCCACCA  
 49751 GGAGAACCTG AGAATTTTTT TTTCTCTTAG ATTTTGAGTA TAGAGATAAG  
 49801 ATTTTATCCT GCATCCAGTT CCAACCTGTT AATATAATTC TATGCAAGTT  
 49851 TCCTCTCTTG TTGTGTGTTAT TTCCCTTCT CTTTATCCTT AGTCATCTAT  
 49901 TCCAATGTTT ATGCTGTGCA TTATTATATT TTCACTGTATC CTTGTGAAT  
 49951 GTAGAGTGT GGTATGTGCA TATTTAAAT GTACATAAAAT GGCATTATAG  
 50001 ATTAAACAT TTTTTCATGT TGTACCATGT TTTTGAGGTT TATTTATATT  
 50051 GCTATGTATA CCTCTAGTCT ACTGCTTCTA ACTGTGAAAC ATTTTTTCA  
 50101 AATTCAAATT CTCATAAAATG CTGTACTTAT TTTGGAAATT AGAATTCAAGC  
 50151 ACAAGGTACT TCTCTGTATT CAACACCATA GCATTTAGC GCTTTACTAA  
 50201 TGGGTGGAAA AATTAAACTT CAGTCCTACT GTCAAAGAG CCTATTAGT  
 50251 CAAAGATGGC CAAGATGGAA AGCTTCCACT TTCCGTGAG TCAGGTCTA  
 50301 GTAAATGTGA ATCTTACACA GAGATGATTA GTTATAGCTC CTAGCACTAA  
 50351 CTCCCTGGAG GCAATGTCCT TGGTGCCCT GACTCTCTTC CATTAGGCA

FIGURE 3P

50401 CTCATCTTG TTAGATGCCT TAGGTTATT TACGTAAAAT CATGCTGCAC  
 50451 TTCTCCCTGA TACTGTGGTT AAAGTTTTA TGGCCTTGCA CCAAACCAAC  
 50501 AGCCCAGAAT AGCTACATGC CAGGGAGATA TTGTCAGCAA GGTTTGGCA  
 50551 TTAATATGAA GAATCTTGT AATTGTTGAA ACTTCTGGTC CAACAGAATG  
 50601 GAAAGTGTGC CAAATAGGAA GCTTTGGGT ACAGGTGACA AAAACCCAA  
 50651 CTCAAACTGG CTTCAACGCT AAGCACATAT ATTATCTCAC TATATTAGCA  
 50701 GAATAACTAA ATATTGGCAG CTGCAGAGGC AAACCCCTGAC TACTGAGAGG  
 50751 CTTGATACAG TAAAAGCTTA TTGCTTGGTC TCACAAAAGTT TGCCAGGGT  
 50801 TGGTACTCT CCTGGGCAGT TAGTGAAC GATATGTCGC TTTATAAGCA  
 50851 ACACATGACT TGTAAAGTCA CCCCTGCAAG GGAAGAGGAC TGGTGGATCA  
 50901 CATAGATTGT TTTTAAGGAC CAGGCTGGAA ATTGACTTAT ATGAATTG  
 50951 CCCATGCTCC AGTGTGCATA AATCCGTAT CAGTCATATG ACCCCATCCT  
 51001 AACTGCAAAG GATGCAGAAA CATGGAGTCT TCCTGTGAAC TTAGGAAGAG  
 51051 GAAAAGTGT GAGCAAGAAG CCACATTCCA TAACAGGAAG TCCAGATATA  
 51101 CAGCAGGTTT TAGGGATGGA TGACTTAGTG ACTCAGTGGT GTCATCACCG  
 51151 TCCTGAAGTC TTTCAATGC TCTCCACCT GCCGTCCCTCA CAATGTCAGC  
 51201 TTTGTCTTCA GGCTGGTTCT CTTCTGGTT GCAAGGTGGC TGCTGTAGTT  
 51251 CAGCCATCAC AACCAGACAT GGCAATGTGC TGGGACAGAA AGGGACCAC  
 51301 CTTAGGAGTG AGGGCACTTT TCCCAGAACG AGCCCAGCAC ACTTCCTCTG  
 51351 ATGGCCAGGA CTGCCAGGCC CAAACTAATC ACTGACAAC CAAGATTAT  
 51401 CCCTGGCATT GAGAGACCAT CACCCCTTGT GCAGTCATGT GGGGGAAAGGG  
 51451 CTGGTTACCA TTTGAACCAA AATGAAGCTT AGCCAATAAG GAAGAGAAGA  
 51501 AAGTAGATGT TGAGTAGGCA ACGAACAGTA TCTGCTATAG CCCATCCCTG  
 51551 GACTCGCTGA GTTTCATGG TAAAGTTGTG GTTTCATC ATGTTCCCTGC  
 51601 ACCATTCTCA GTAAGTTGAT GCCTAGCATT GCATATTTTC TTTTGCTATT  
 51651 GTAATGCTGT TTCCATGATA GTTGCTGTG TATAGGATTG TCATTGATT  
 51701 TTCACCTCAC TTTGTTCAAGC AGTATTAGAT GTTAATTAGA GACTGAGAAA  
 51751 CTTAAATTCT TTTTCAAGC AGTATTAGAT GTTAATTAGA GACTGAGAAA  
 51801 CCCAGAGGTG GAAGGATCTT AAGTGGAGCA GGGGATCGGA TTAAAGAATA  
 51851 AGAAAGCAAA GAATACTGTA TTTCATTTCT GTGAAAAGAG AGGTTACATT  
 51901 TCCTGCATG AGGAAAAAAGT AGGAGTGTG GTCTTCTCA AAACCTGCTA  
 51951 TAAGGCTGGG TGCAGTGGCT CATGCCTATA ATCAGCACTT TAGGTGGCCA  
 52001 AGGCAGGAGG ATTGCTTGTG CCCAGGAGTT TGAGACCAGC CTGGGAAATC  
 52051 TAGTAAAGCC CTGTATCTAC AAAAAAAATAA AAATTAGCTG AGAGTGGTGG  
 52101 TGACACGCTG CAGTCCCCAG CTAGCTGGG GGTGAGGCA GGAGGATTGC  
 52151 TTGAGCCCAG GAGGAGGTCA AGCTTCAGT GAGCTGTGAT CATGCCACTG  
 52201 AACTCCAGTC TGGGTGACAG AGTGAGACTC TGTCTTAAAA AAAAAATTGCT  
 52251 ATGAGAGAAT GCTCTAGGTA TGTGTGTGGT CGTGGTAGAG TATAGGGGTG  
 52301 TACGATCACT GTAATGTGCT GGAATAGTAC CTAATTITGA AACTGCATGG  
 52351 TTAATAACAT CTTTAAGAA TGTCTAAGTG CTTTAGAGAC TTCTTTCCC  
 52401 CCATTCTCCG TGAGAAGAAT AGGAGATAGA TCGTTGGTTT TCGTGTGGAA  
 52451 AAATTAAGAA AGAGAAATGA AGCAGTTAA ATTTCCCTCAC ATTATCATGG  
 52501 TATTAAGTAA ACTAGAGCAG AGGTCTTGG GTTAACTC ATTTGGGAAA  
 52551 ATAGATTGAG TGTGGCCAAG GCAACCATTG CTGTAGTGAA CTCAGCTCCC  
 52601 TTTTATGTAG TGAAGATAAA TAGTTGAACA ATCCAATACA TGCCCCAGTC  
 52651 CCTCTCTCTC TACACACACT GCACACACAC ACACACACAC ACACACACAC  
 52701 ACACAGTGCC AGGAGACATT CGGGGACCAT ATTTTTTAA GAAGAAAAAG  
 52751 TATTATTATG CTTTCAAGTC AGTTATGTTA ATTTATTCCCT TTTTGAGAT  
 52801 GTAGAGTAGC TCCTTTGTAT CTGAGTTTGCT ATATTACATG AAAAGACTAG  
 52851 TGGATAATGA TACCAAGCTAT CCTATGTTAC AAAAAAGCTGC AGATCCCCT  
 52901 GCCAAGTGGG CTATACAGCT ACACAAACCT TCTGTTACCT GTTGGACACA  
 52951 CTGCCACAGA GGCGAGCAAC ATGCTGTCTG CCAATTAAAGA ACTCGGGACC  
 53001 CTTGAAACCC ATTTGGGGAT ATATATGTAG CAAATAATCC AATTAAAAA  
 53051 GGGGCAAAAA CGTAGGTTAT CGGAGTACAT TAGACATGCT AATCTGCAGC  
 53101 AGTTTTGTGC AAACCTAAGT ATAATTAAAT TTGTTAAAT GTTTTCCCTT  
 53151 TGATATCCAG ATAAAGATTA ACATAGTCAT TGCAATTAT ATTTGTATT  
 53201 TCAATAAAACA TCACATTAA CTGAAGTATA CAGATCTATG CAAGGGATAG  
 53251 TGAATAGAC AAAGCTCATG TGACTTTCC AGAAGGAATG CATTAAACA  
 53301 TTGGTGGCTC CTGTGGTTAG GGGGACTTCC AAAGCAGTAA CTCTTGCCTT  
 53351 TCCTCAGCAG CATCATCATA ATTACACAC TATACACAAT AATTATACTC  
 53401 CTAGCTGTGG TTCTATTCTA CAGCAGTTGC TGCTTTCTG GAAACCTTGG  
 53451 GGAAAATAGA AATTTAAATA GCTCATAGAT TTGGCTATGA TAAGTTACA  
 53501 CAAAGACAAA ATTGCATTG GCAGTTAGT TTCCCCAACC TTTATTGTT

FIGURE 3Q

53551 TCCTGATAAC TATATTTAGT CTGAACCTCT TTGTCAGGA CACCACATAG  
 53601 GTTATATTGT CTTCCCTTT GCATCCAATG AAGCAGCATA TATTGCCAGG  
 53651 TCATTTTTT TTATGGTGT GCAAACATTG ACCACCTGGC CAAGGGAGTG  
 53701 ACTGCCATAC CTCTTATTGT GAAGGCACAT TTTCCCTCCTG TAATTAACAA  
 53751 GTAACCCCAAG GGGTGATACC TTGAGACAAT GAGAATAATT TGTTTCAA  
 53801 TAACTTTTAC CCAAGAATAG CTACACACAC CCCCTGTAAAT TATAGACTTA  
 53851 TGGGTCAAGTT TTTCTCACCA TGTGTTTAA TCCATCGATG TCATTCTTC  
 53901 TGATATTTAA AATCGTTCAC AGATTGGCCA GGAACCCCTTC AGACCAGCTT  
 53951 CTGTCCTCAT TGAACCTGTC CTTGTTAGC TTTGAGCACT TCTTGGCGTT  
 54001 TTTGCCCAA GATATCTTAG GCTTATCTCG TACTTTCACT ACTCTGGACG  
 54051 TGTGTCAGAC CTGAAATCAG CCTCTTCTCC AAGGAGACCT GTTCCCTT  
 54101 AGTGAAAAT AATATTTACA AACCAAGAGT TGGGTGTTG TGTTTACTG  
 54151 CTACTGGGGT GTTAATTTTT CTAGGCTCTT TAATCGTGAG TTCAATATGA  
 54201 AACACACCAA TTATTTGTT TTTATTTGA ATTACCTTTC TTGAGGTATA  
 54251 GTTTACCTAA ACGAAAGTGT ACTCATTGAGT AGTGTGAGT TTGCTTCATG  
 54301 TTAGCAAATT CATATACCC GAACTGTCAC CCTGTCACCT ATGACCTTT  
 54351 GCAGTCAGCC CTCTTCAGC CTCTGACCTG CTTGAGTCA CTGTAGATTA  
 54401 GTGTACCTAT TCTAGAATT CATGTAAGTG GAATAACACT ATATGAGGCC  
 54451 TTTCTCTGG CTACTTTAC TCAGCATTAT GTTTGGAAA TTGGTACATG  
 54501 GTATTATGCA TACCAATTAT TCATTACTGT CTCTTACTGAA ATAGCAGTCC  
 54551 ATTGTATGTA TGTTTGTCTT ATCTATTGTT TTATCTATT ACAAGTTGAT  
 54601 GAACATTGG ACCATTCCCA GCTTATGGAT ATTATGAGTG AAACGTGTTG  
 54651 AACATTCAAG CACAAGGTTT TGTATGGACA TGAGCTTCA TTTCTCTGCA  
 54701 GTAAATACCT AGGAAAGGAA TTGCTGTGTC ATGTTTTTA ACTTTATAGG  
 54751 AAACATACCAA TTTTTTTCC CAAGTAGTTG TTACCATTTT TTACTACCAC  
 54801 CAAGAATGTA TATGAGACCT AATTATTCCA CATTGTCATC AGCTCTGGT  
 54851 ATTGCAACATC TTTTCATTTC AGCCATCTG GTGGGTCACT AGTGGCTTTA  
 54901 ATTTCTGTTT TTTAATTGTT TTTAATTCT GAAATTTTAA TTGTTATTGTG  
 54951 GTTTTAATT CCATTTCTGT AATGGGTGAT GACACAGAGC ATCTTTTGT  
 55001 GTGATAATTG GTCATTCATA TATCTTGATG AAATGTCCAT TCATATCTT  
 55051 CACTGACTTT TTTAATTGGG TTGCTTTTT TCTTGAGCTA TGAAGTTCTA  
 55101 TGCATTCTGA ATACTAGTGT TTGTCAGAT GTATGTATTA GGATATGTT  
 55151 TCCCAGTCTA CAGATTACTT TAAAATTTT CCTAATAGTA TCTTTGGAG  
 55201 AGTAGAAAAT TTTAATTGTT ATGAAGTCCA ATTATAGAT TTATTTAAGG  
 55251 TTCCATTAT TATGTCGTG TTTAAGGAAG TTTGCCCTAC CCTAAGACCT  
 55301 CAAAGATTTT CTCCTGTATT TTCTTCTAGA AGTTGTAAA CTTAAAAC  
 55351 TTAGCTTTG TGTTTGGGTT CATGGTCCCA TTTTAATTAA ATTTTTATGA  
 55401 ATTTTGTGAG ATATAGGTGT TGTTCTTTT CTTTCTTTT TAATTTTTA  
 55451 GTTAATAAAA ATGGTATATA TTTATATTGT ATAACATGAT GATTGATAC  
 55501 ATGTATACAT TGTGGAATAC ATATTACCTC ACATGGTTAT CATTTCCTG  
 55551 TGATAAGAAC ACTTAAAAAT CTGTCCTCAGC AATTTCATAC TATATAATAT  
 55601 ATTAACATATA GTCACCATGA TATACAATAG ATCTCTTGAA CTTATTCTT  
 55651 CTAAGTAAAA ATTTGTCTT TGACCAACAG CCCCCCTGCC ACCCCTCACT  
 55701 CCCTGTCCAA CCTCTGTACAC CACCATTTA CTTCTGTTT CTATGAGTT  
 55751 GACTTTTAA GATTCCATTAT ATCAGTGAGA CCATTGGTAT TTGTGTTCT  
 55801 TAGCCTGGTG AATTTTACTT AGCATAATGT CTTCCAGTT TTTTATGTT  
 55851 GTTGCAAATT ACAGGATTTC CTTCTTTCT AAGGCAGAAT AGTACCCAT  
 55901 TGTGTTATG TGTATATATA TATATGTTG TGTGTTGTTG TGTGTTGTTG  
 55951 TGTATATATA TATATATATA TCCCATTTC TTAATCCATT CATCTGTTGA  
 56001 TAGGCACTTA GGTTGATTTT GTATCTGGC TATTGTGAAT AGTGTGCAA  
 56051 TAAACATGGG CATTCTCTT GACATACTGA TTTCATATCC TTTGGATATA  
 56101 TATGTTCAAT ATGGAATTG CTGCATCATT TGGTAGCTCT ATTTTTAATA  
 56151 TTTTGAAGAG CCTCCATACACT GTTCTCTACA ATGGCTATGC CAATTTACAT  
 56201 TTCTACCAAC CATGTACAAG GGTCCCTCTT TCTCCACATC TACTTTTTT  
 56251 TTTTAGCATG GATGTCCATT CATTCCAGCC CTGATTGCTG AAGAGACTGT  
 56301 CCTTTCCCC CATTGAACTG CCTTGGCATC TTAGCCAGAA ATCGACTGAC  
 56351 TATATGTAGG AGGAACATT TCTAAATTCT CTAGTCTCTT CCATTTATCT  
 56401 ATGTATTTAT CTTTACACTA ATGCCACATT GTCTTGATTT ATATAGCTT  
 56451 ATAATAAGCA GAGCCCAAGTC AGGCCCCCTCC TAGACAGTCC ATACCAGAAT  
 56501 TCACAAATAC ATATGACCTA AAGCAAGTAA CATAATTAAAG TGAAGCTGTT  
 56551 CTTGTATAAG CAGTATTACT TTATTTATAT TAAAATCTAA CGGGCTAAAA  
 56601 TTTCAACGTG GTTCATTTC ATTATTAAT GTTTGAGTC ATGTCCCTT  
 56651 CTCACATGTC TCATGGTTCT TATTATGGTT TATTCTAAAT GATATCTTA

FIGURE 3R

56701 TACACATACT TTTCACACTA AATATTAGG AACATTCCCT GTTTTCATAC  
 56751 ATAGAACAAAT ACTGCCTCCA TACATTGGT AAATGCGTGG CCCATTTGAT  
 56801 CTGTTTTCA GTTTCCCACT TCAAAGAGAG GAATACAGTA TCTCCCATGA  
 56851 CAGCATCAGC TGGTTAATGA ATGGTGATTG GCATGCAGAC TCAGCATTGA  
 56901 GACTGCAGTG GGGAAATGATG GGGACACTGT GGCAAACGGG GGAGGGCTGG  
 56951 CACTGCTGAG AGGGGCACAG CCACTCTACG CCACTTTCAT AACATCATGT  
 57001 CAAATGTACA CAAATTCAAC ATTATTATT TTGTTGCTCA AATTATTCCA  
 57051 GCTTTGTCCA CTAGGAGCTG TTTCAATTGG CTATGTCCTT TTGACACACA  
 57101 CACCAATGTG GGTTGTTCG GTTTTGTGTC TTATTTGAAT GCTTCTTCC  
 57151 TTTCTGGCTC CTCCAGGCTT ATCTTGTGTA TTTCCCATCC CAGTCCTAGA  
 57201 ATCAGGCCATT TCTCTAAAGAA TCCCTGGTTT CTTTTATAAG AGAATGGCAT  
 57251 TAGAAAATGC CACAGAGGTT AAGTGTCACTT CCCATCACAT CATAGCAAGG  
 57301 GTACATACTA TCAACACGAT TTATGACTAT CGATGTTACC CTTAACATC  
 57351 TAGCCAAGAT GGATGGTGAAT ATCATTAGGA GGGGGATGCA ATAAAGAGGA  
 57401 AGAAAAGCAG ACTTTATGTT CATTTCAGG CTTGTTCCAA AGGAAAGTTA  
 57451 TAGGTGTATT TGATCATATA AATATCGTT TGTTTGGAA AATCACGTTT  
 57501 AGGGACAATA AAATTGGAAA GAATCCTTGC TTCCAAATCA CCTCTGTGTT  
 57551 CAAATCTTCA TCATATTGTC ACTGCCCTT CCTTTGTGTT CTTAGTTCAT  
 57601 GGGTCCCATT GGATTTGATG GTTTCGTTT ACTTTTTGCT ACTGAAATTG  
 57651 TTAGTTTAAA AAAACAGGAT ACAGAGTGT ACATTTTTA TTGTAACCTC  
 57701 ACTTTCTTGA AGTTGCCTAT AGCATTAAATTTA ATTCAGAAG ATCGATAACT  
 57751 TTATTCAATT CCCTTTGGAA AAAATAAAAC AAGATTTAACT TAGTGGCAT  
 57801 GTCTTCAAGG AAGCTAAAGA CATTAACTT TTCTCTGTTT GCTCTAAGGG  
 57851 CATTCTGTGATG ATTGCCTGAA TGTGATCTTC TGAGTGTCC AGTCCCTGGA  
 57901 GCTGGCTGTT AGCCATCTCC CAAGGAGGGT CGAAAAGAAC GTAGCAGAAA  
 57951 GCTGCAGAAA GAAAAGCTGG CTAAAGAAC AGGAGCTGCC AGCCAGGGCA  
 58001 ACATAGTGTGAG ACCCCAACTC TATAGAAAAT TAAAAAAAGCT GTCCCTGGCAT  
 58051 GGCATGCCTG TAATCTTAGC TACTCAGAAG GCTGAGGTGG GAGGATCACT  
 58101 TGATCCCAGG AGTTGGGGGC TGCACTGAGT ACTTCCAGGCC TGGGTGACAG  
 58151 AGGAGACCCCT GACTCAAAAAA AAAAAAAAG AGCCGGTTGT TGTAAAGGGC  
 58201 CACCAACTG GAGTGCATGG TAGTCACCTG CCTCCCTCCT TTCCCTGGAGA  
 58251 AGATGACAAC GTGATGAACA AGCACCACTA CCCTGGAATA GTTTAAATGG  
 58301 CATTCAAGCCT GGAGGAGTGT GCACATGCAC CAAATATATC TTGTTGTGTC  
 58351 TTTGTAGCCA TTGGGTCTAT GGAGATTACT CTGGCTGTGA GTTTGGTTGA  
 58401 TTAACATTGC TATGCAAGCC CTGTCATTT AGCTGGAGGT TATCACAGGA  
 58451 GGAATAAACAC ACAGAATATG ACTTTGGCAT TGAATAATG GGAAGAGAGT  
 58501 GCTTTGGGG GCCAGAACTG TTTGTAATAT TATAACTCCT ATAAATACAT  
 58551 GAATTGCTGC CCCTTTATCA TAATATCCAT TGCTTTAATG CTCTGTTTA  
 58601 GATTGGAGTT CACACCAGAC ACCTGAGATT GTGTTTGTTA TGTAACTGCT  
 58651 ATTTCATGTT GAGAAAGTAG CAAAGCTTTT AAATACTGAG AATATTTCAG  
 58701 TTACATGAAG ATACTTTAG TAGTCACTGT TGTGTTACA TTCCCCCTAC  
 58751 CCCTCAGAAA ATAACAGGGC TGTTAAGGAA TCCCTAAAGA GCATAGATTG  
 58801 AGTGAAAATG ACACAGAAC AAGGACAGAT CCCAGGAGTG AAATGAAGAA  
 58851 GTTCTGTAAA TAGCTGTGCC GTTTCCCTT GAAATGTCTG GCACACTCTA  
 58901 TATAGTATAG TGGTCGAGGA TAGAGGGGCT AATTCTGTGA TGAAGCATTG  
 58951 TGCATGGAAT TTCAGCAGGG CATAGATGGT GAGGGCATCT GGATCTGTTT  
 59001 GAGTTTTAA ACTAATTATA TGACAAACTT TTAAAATGT AGCATACTG  
 59051 GAAACATCAT CCCGCCACGT CATCTGCATT TAAATAATCA TTGCCTCACC  
 59101 TTTAACACCC AGCCTCTAGA AAAATAAAGC ATGAACAAAT GTTAGCTCTG  
 59151 AGCTGCTCTC AGTAATTGG AGTGTGCTAA GCAAAACCTA CATTTCCTAG  
 59201 CATGAAATTG GCACAGGAAT GCATGCAAAG TTTGCTTCTT TTGATTCATC  
 59251 TGGTTACCTA GAACCTGAGG CCATTCTGTA TTCTGTGGAC AAAACCTAT  
 59301 ATACCTTCA TGACCCAGCT TAAATGAAAAA GTCTAATGCA AAACATGCTG  
 59351 AATTCTGTG GCCATATTAA ATTGTTCTAG TGTTCCCACA GGTATAGTTT  
 59401 ATTATTCTTT TTAATTCCCC TTTAATGGCA ATTCTCTTTT CCCTTTTTA  
 59451 AAAATGTCTT TTGCTTCTG TTTCATTATT ACCTGTCCTC CTTTTTTATT  
 59501 GTGAGCATGT CTCTTGACCA GCACAGACAC ATAGTGTGATT CTTGTTACAT  
 59551 GTGGGCCAC ATTATTTTT TATTCTATT TGTTTTGAG CCAGGGTCTT GCTTCATTG  
 59601 TTATTTATT ATTATTTAT TTTATTTGAG CCAGGGTCTT GCTTCATTG  
 59651 CCAGGCCAGA GTGCAGTGGT GCAATCACAT CTCACTGCAA CCTCTACTTC  
 59701 CCGGGCTCAA GCAATCCTCC CGCCTCAGCC TCCCAAGTAG CTGGAACACTAC  
 59751 AGGCACACAC CACCAACCAC ACCTGGCTAA TGGGCCATA TGTAAATGAC  
 59801 TAATTAGTAT TTAAACACTT GCCAAGAGTT GTTTAATACC TGCTGTGTC

FIGURE 3S

59851 AGGGCACAAT CTTATACATT CTTAAGGGAG CACAGAGGTG TCAGATGGGG  
59901 TCTGCCACC AGTTTTTCAC AGATTTGAAT ATTAGCGTT CTGGGCAAAA  
59951 GCAGTTAGG AGCTGAAAAA TCATGGCCAT TTTAAGAAGA TTATCTTACC  
60001 CAAAAACCCA CAGTACTATT GTTATTGCC TATATATAAA GCCATTCTGT  
60051 TAATTTTTA AAAGTATGTA TTAGGTTAA CCTGGTTCT CTGTGTTGC  
60101 CATGTTAAC ATCTAAGGC AAAATTGAA ATATTTTA CTTTCTGAGT  
60151 ATGTCAGGAA AGAGGAGTCT GAAGCTGGAG TGAGTGGGG AGGTGGGGG  
60201 GACTATATT TTATGAAAAT TTTAGTAAAT TTCTGGGTT TTTGTCCAC  
60251 CTATGGGAA GATCTAGGAT ACAAAAGCAT TAAATGTTAA TATTGATTCA  
60301 AGAATTAAAT CATCAAAACA TTGCTGGGAG AAATTAAGA CCTAAATAAA  
60351 TGTAGAGAGA TCATGTTAT GGGCTAGAAA ACTCAATATT GTTAAGATGT  
60401 CACCAAATTA ATATATAGAT TCAATGCAAT CTCTATCGGA ATTTGCTGAA  
60451 ATTGACCAAC TGACTCTGAA ATTCACTGTGG AAATAAAAAG GATCTATAAC  
60501 AGTCAAAACA ACCTTGAAAAA TGAAGGATAA AGTTGGAGGA GTAATACTAT  
60551 CTGATTATAA GACTTATTAT AAAGCTATGG TAAATCAGGA TATTGTGGCA  
60601 TTGGTATTAA GATCACTGAA GAGACCAATG GACCAGATTA GAGCATCCAG  
60651 AAATAAACCC ATACATATAT GCATAGCTGA TTTTGAAAAA AGTTGTAATG  
60701 CGGGCTCAGT TGTTCCAGGA CAATTAGATA TAGTTGGAAC AATTAGTTAT  
60751 CCATATACAA AAAAGAAAAA GAACTTCAT CAGTTCCCTCA TACCATATAT  
60801 AAAAATTAAC TGAAAATGGA TCATAGTCTA AATATATTAC CTAAAACAT  
60851 AATACTTGTA GAAAGGAGGA GAAAACCTT GTAACCTTGA ATTAGGCAAA  
60901 TATATATATA TATATTTTT TTTTTTCAA GCAGTTCTCA TGCTCACCC  
60951 TCCTGAATAG CTGTTGTTAC AGGTGTTCCC CACCAACACTT GGCTAATTTT  
61001 TGTATTTTTA GTAGAGACGG GGTTTCACCA TGTTGGCCAG GCTGGTCTCG  
61051 AACTCCTGAC CTCAAGTGTAT CCGCCCCACCT CGACCTCCCA AAGTGTGCTG  
61101 GAATTACAGG CATGAGCCAC CGTGCAGAGC CACAAAAATA TTTTAAGTAG  
61151 AACATCAAAA GCATGATCCA TAAAATAACA AATAGATGAA TTGGACTTCA  
61201 TTAAGATTAA AACTCTGTT TTTCAAAAGA CACTGTTATA AGAATGAAAAA  
61251 GATGAGCCAC GGAGTGGGAG AAAATTTTA TACATCATAT AAAAGATTTG  
61301 TGTGCGAAT ATATAAATAA CTCTCAAAAG TCAATGTAAG AAAACCTTTT  
61351 TTTTTTGAA TGTGCGAAAG ATTGAACTG ACTTTTGCC AAGGAAGAGA  
61401 TACAGATAGC AGTAAGCATA TTAGTCATTA AAATAATGCA AATTAAAAC  
61451 ATAATGGGAT ACCACTATTA GTAGTATGTA TTAGAATTAC TGAAATTGAA  
61501 GATGACAAT ACCAAGTGTG GGTGAGGATG TGAGGAACT AGACGTCTCT  
61551 TACACTGCTG ATGAGAATGT AAAATGGCAG AAGCACTTTG GAAAATAATC  
61601 TGACAGTTTC TGAAAAAGTT AAATGTATAC CTAGTGCATG ATCCAGCCAT  
61651 TCCACTTCTA TGTATTTATC TTAAAAAAA GAGAAAGAAA TTGCATAAAA  
61701 CTTGTAAACCA CGTATTTAGT TTGTAGCAGC TTCATCTGTA ATAGCCAAA  
61751 GCTTGAAACCA ACCCAATGT CCCTCAGCAG GTGAATGTGT AAACGTGGT  
61801 ATGAACATACG CAATAGAATA CCATCCAGTA AAATAAAGGA GGGAACTATT  
61851 AATGTACATT ACAAGTAGAT GAATCTCTTT ATAATATATGC CAAATGAAAG  
61901 AAGCTATATT TACACATACA CACATTCA CACACCCAC ATGCTGAATT  
61951 ATTACATTCA TACAAAATTG TAGAGGATGC AAAACTATGT ATAGTTATAG  
62001 AAAGGAGATT GGGGTTTCTC GGCATGGGT GATATAAAA GGGATTGGAG  
62051 AAATGGATTA AAAGCACAAG GAAATTTTG GGGGTGCTGG GTGTGTTAAT  
62101 TATATTCTT GTGGTGTGTT CTTCATGGCT ATATACATAT GTCAAAATGT  
62151 GTCTAATTTT AGACTTTAAA AAGCGATTT TATTCTATAT TAGTATTCA  
62201 GGGATCCCAA GACAACCTG TTTGGTGGTT TACTAGGACC TGTAGCACTC  
62251 AGCATATAGT CGTTCTTAGG GCTAAGACTT ATTACACTGA CGTAGAAGGA  
62301 TACACAGGTG GATCAGTAAG GGGAAATGAC ATCAGGCAGG GTCCAGAGGA  
62351 ATCCATGTGT GGGTTTCTG TGTTCCCTCC CTCCCTCTGA GATCACACAC  
62401 AGCATAACCAC CTCTCCAGTA GTGAAAATGT AGTCACAGGC GTACAATGAT  
62451 TATACCCAGG GAAACCCACT TAAGATTCAA GAGTTCAAGGG TTTTTGTTCA  
62501 GGGCTTGTCA CATAGGCACT CTTGCCACC AATATTTCAT ATTCCCTGAAA  
62551 GGAAGCAGT TGTTCACTGC CCCAGACAGA TAAAATAACC TTATAAGGGT  
62601 AGGAAATGTT TCAAAAGCTG TGTTCCCGGA CACTAGCCAA GGGCAAGCCT  
62651 TGCAAGCAGA CCTTTCTAAA GATAAGGCTT TAGATAAAAGT CTCAGGCTTG  
62701 TTAACACTT TCTGCAGTCA CTTATACCTC AGCTTGTAA AAAAAAAA  
62751 AGTTGAAAAA GTTGTGTGA GTTAGCACAA GACAGTTGCA GTTCATTAT  
62801 TGAAAAAATG ATAAGAGATT ATAAAAAATA GTAACTTTAG ATTTGAGGCA  
62851 GACCAATGCA GTGAGAACCT CATTACCTGG AATGCTTCAT ACCCTAAAT  
62901 CCCCTCTTGT GAATTAGCCA GGAGTGTGG TGGGTGGCTG TAATCGAGCT  
62951 ACTCAGGAGG CTGAGGCAGG AGAATTACTT GAACCCGGGA GGCAGAGATT

FIGURE 3T

63001 GCAGTGAGCC AAGATCACAC CACTGCACTC CAGCCTGGC AACAGAGTGA  
 63051 GACTCTGACT CCAAAAAAAA AAAAAAAA AAAAAAAAT CCCCTTTTG  
 63101 GAACAAGGTA GGATAATAAT AAGTAAAACC AGGAAGCTTG GCTAATGGGA  
 63151 GCTTCTAATT ATTTTACTC TTTAATATTG TGACTTTCAT TTCTATTGTA  
 63201 TTTGAAAATC TTTCCAAGGT ATATCATTTC TTTCTTTCA TAAAAAAATC  
 63251 CTTGGTTGAT GTTCATTATT TAACCACTGG TTAACGTGATT ATGACCCAGT  
 63301 TCAGTTCTAT AGCAAATAA AGATAAAGCA CTGCTGTTGA AATTATAATT  
 63351 ACCTCAACAA CAAGACCACC TCATGCAGTT GTGCAGGTTA TACCTCGTCC  
 63401 AAGGCACACC CAGCTGTGAG GGTGCGTGG A GTTAAGTCC AGCTTGACT  
 63451 TTGCCAAGCT ATGGGCTCCA GCATGGGTG TGTCTGCCG AGAAAGGGC  
 63501 ACCTTTTCT AGTTTATGCT AAGATGCCCT TTGAGCTGTT CAGCATGAGC  
 63551 CCTGGAAAAA GGTGGTGGTA GCGATTTCCT CCTACAGTGC TGCCTAATAT  
 63601 CAGCAAGCTT TCTTGTGGGC ATCTCTTCC CCTTAAAGAA ATCCAGCTAG  
 63651 TAACTTCAG TTGAGCGTCA TGTAAACCA GGATTCCACT GTGTGTAACA  
 63701 AGGACAAGCG ATTCCAACGG TCTCTAGTTT GGCCCAATTG CCCTTAAAG  
 63751 GCAGGCAAAT GTTTAGGGTA TGTGTTCTT TTTATCACTC TGGAAGAAGC  
 63801 CAGGTCAGG TCTGTATCTG GATCCCATT TAATGTCCC CAGCCAAGAA  
 63851 TTCTGTGTAT GTATAGCAAT AGAAAAGTC GAGAAAGGAC GCTCCTGTGA  
 63901 CTTCTCTGAA GTTTTGTTC TTCTGAGTA ATGAAGTTTC CTAAAGGGG  
 63951 ATTAACATT CTCACCTCG AAGATAGAAG TATTGTTTAA AGATTCAACT  
 64001 TTGAAACAAA TAGGAAAATA TCTGATAGTT GCAACTTAGC TTCAAATCAG  
 64051 CGATGTCCAG ATATTGACAA CCATTTATT TCTCCTAAAC CTTGAGCCCT  
 64101 AGCCAATTT ATGACCGAGT AGAGATCATG GCACAGCAGC CAGCCTAAC  
 64151 GATGGGGGCC ATACTCTAGC AGCAGAAGGA TTCTGTTTTG AAACCTTCAG  
 64201 CTTTGAAT CTTACACCAC TACCAGCCCT ACTCTCTCTA CATAGATCAC  
 64251 ATTCAATTCC TCCCCTTTT TCCTAAGGAA ACTTAAACCA CATGCTTTT  
 64301 CCCTTTTAT AGATGCCAAC CACCCGCAAG GTCTCCGTCT GGCCTGTGGG  
 64351 CCTGGTTGGT GGGCGGCGCT ACGAACGTCTC GCTGGTGGAA AACGGCAAAG  
 64401 TTGTTGGCTG GTACACCGGG TGGAGAGCAG ACAGGCCTTT TGCCATCGAC  
 64451 ATGGCAGGTG AGCAGTGTGG GTGATGACAT TTGTTCTGC TGGACTGTT  
 64501 TTATGCTCTT GTTTATAACG ATGCCACTAGA TGAAGGAAGC TTTAAAAGAC  
 64551 AAATTGGAT AAAACCTAC ATCATATCAT ATTCAGGAGA TGAAATATT  
 64601 AAACCTCAA ATAGGCTCT TTGGTTAGAT CAAGTGGAAA TTGATTTGGA  
 64651 GGGTATTAG AAAATGCCCT TTCTGTTCCA TTTTGTCCCC TGTCTGTGCC  
 64701 TTATCCCAC AAGCGTCTAC ATGGCAGCTA CTGGGTTGGC CACTGGGAT  
 64751 TCGGTGGTGA GAGCTAGACC TGGCTCTGC CTTCCAGGGG TCTGTTAGCT  
 64801 GGAACCTTTT GACTCCCTT TCTAGAAGAC TGATATATTA AAATATATCA  
 64851 TGTTATTGA TAAATTTAAC AATGATATAA AAATTGACAA GTCATTTAA  
 64901 TGCTTATTGA TAGGTTTAGT GCTTTATTGA TATATTTAAT ACTAAAATAT  
 64951 AAACCTAGAT TTCTGGTATT TCAAGAATT ATTGAGTATA ACTGTCTAA  
 65001 AGTTTTATT CCCTGAACAA CCAACTGAAT TGAATTAGCC CTGCAGTAGG  
 65051 ACCACACGTT CTAAAATGCT ACTTTATCAT AAAACAACTC ATTTCTATG  
 65101 GGTATAGAA AATGATGCCGT GTGATAACTG TGGAAGGATG GAGTTGAAA  
 65151 CATGAGGCTC AGAGGCAAAA AAAAAAAA TTGGTGCACA TCTATACTCT  
 65201 TAAAATGAA GGCAGAAAGG CTTCAAAATT GATCTCATCA ATCTTGAGCT  
 65251 CTGAAGCACA GCTCTGTCGG GCTGCCAGCC TGTGCTTGCC CCATCTCTG  
 65301 TGCATATTTC CCAGCCGTAG TCAAGATCTC CGCGTTCAGA ATTCTGATGG  
 65351 GATGGAGGCT GTCTTCTGAA CTGGATTCTCAT CACTTTTATT CTGACAATAC  
 65401 TATAATCTG AGGGAGCCAG AGGACGAAGA ATACCAAGGAG TCATCTGAGG  
 65451 GGCACAGCGC TCATGGACAG CTGCTGTTGGT GGTCTTGTCA CATGGCATCG  
 65501 TGGGAGAGGA CAAATAGGAG ATTTTACTC AACATTTAAC ACACATCTCC  
 65551 ACAGCACCAG CCCTCAGCCA GGCGATGTCT CAGGCCCTG ACCTCTCCAT  
 65601 CCCTCTGTTA CTCCAGCTGT TTGCTTTGGT CTTCAGTTCT TGCACTCCA  
 65651 GAACTGAGCT GGCATCTCAG TCTAGGTCTC CACCTGGAGG CAGAAGGAGA  
 65701 GGCAGCTGAG CCATCTTGGC CGGTCTGAG GACCCCTCGAA AGAGGCCCTGC  
 65751 CCTCGACCCCG CTCAGACTGC ATGGCCCTGA AACATGGGG CATAGTGTAT  
 65801 CTTTGAAAAA TCGGGCTTCT TGCTGACCG AAGTGTACCT TAGAGCAGAA  
 65851 AATTAGACA ACATTAGGGA AAGTCCTCT GCTTCTCTGG GATGTAGTT  
 65901 TCTTGTGTAAGT GAGTGGAGCAG CTGCCGGAGA TGACCAACAG GGCCCTCCAG  
 65951 TGCAGCCCTC CTTTCCCTGGC CTCCCACCTT GGAACCTCTCA AGTAAGAGCC  
 66001 CAAGCTTGGG CTTCTAAGTG AGGATTGTGA CTGCTCAAGC AGCCGCAGAC  
 66051 AGACTTTTGC TTCAGATTTT CCCAGAGCCT TGTGTTCAACA CGGACTTCCC  
 66101 AGACATATCT CCTTAACACG TGGGATGTCT GCCCATTTC TTGCATGGAT

FIGURE 3U

66151 CATGCAAGGT GAGGGCAACT TGGGTAACCT TTCCCTGGATT TTAATCTAGG  
 66201 AACTTTATGT AGATGATCAC GTATCAAATA GACTTGTGA ATATTTGCAT  
 66251 TGGTCCCCCT AGAATTGGG TCACATTGAT ATTTCTAAAAA TTAAAGATGT  
 66301 ATGTGTTTGT GCATTAGGGC TGGCCTATCT AGGACTGCCA AATTCTGTGG  
 66351 GAATTCTTTT TTCCATGACA AGACCAATGT TTGGATTTT CTAAGCATT  
 66401 CAGTATATTT TCAAAGCATA TTAAAAACAC CCATCATAAT AAGATATGAA  
 66451 TTATTTCCCT GCTCTGTATT CATTATCATG GTTTAAAAT AGGAATAAAG  
 66501 TGTCTCTAAG GAGACAACCT TTGTCACACT AAATAATT TTTCACCTCA  
 66551 CACATGAACT TGCTTGCAT CTTAGCTTTC AGTAAATTAT TGATATT  
 66601 GGAAGCTTTT AAGTGTAAAGT AATTGGTCG ATAGGATAGT TATTCTGT  
 66651 TTGAGGCAGT TTGTTCTAAT TCTAACTTAA AAATTTGTGG CTTTGT  
 66701 ATTCCACATA CAATTCAATT ATTCTCTGGG AAGAGGGAAA AGACCTTTA  
 66751 GGCCTTCATG TTCAATTGGT GCTTCCCGCC TCATTTCAA GTTACATGTA  
 66801 CACACACACA CACACACACA CACACACACA CACACAATCT GAGCTCTGAG  
 66851 GAGCTCTACT TTGAAAATGC TCTGTGATAG TCAAGTGAGA GCACCATATT  
 66901 GGAGCCTGGG TCTGTCTTG CATTGCAAAG CGGATTAAGA GCCCAATGG  
 66951 AACATTGTG GGTTTGAGCA CATTCAAGT AAGCCCTCA GAGCCTGT  
 67001 TGTTGTATC TCTGTGAGGT CATCACATAG CCCATCACTG GAAACTCATT  
 67051 TGAGTATCAA ACATTGAAAC TGCGATGTTT CATGTCATTC TAGTAGTTCT  
 67101 TACACTGTCA TTTTATTGCG ATGTTGAACT TGCCTGATAC TGAAATT  
 67151 CTCTCAGGTG ACATGAAACA TTGTTCTGA AATAATCTTA TGTTTACAAC  
 67201 CATAATGGCA GAATTAAGAT TATTTCTGTT CCATTGGAGG ATATTTTTA  
 67251 AAATAATGAT TACTACTTAA AAAAATTAAT ATGCCCTGCC ACAAGATGG  
 67301 AAGAAAACAC TGGAGGCAGC CCCACTGGTG GTGTGCAGTT GGCTTCAAAG  
 67351 CTGACCAGTA GCCACATAGC TCTGCCAAGC CAGTGAGGCC CTGGGGGTT  
 67401 TCTACTGTT TGTGCCCTAG AATTCAATT TTACACCTCA GGAATCTGAG  
 67451 GATTGCTAA AAGTGGAGGA GTCCACAAA GGTTTAGCT CTGTTTGAA  
 67501 GGGAGGCAGT TAATTCAG TGACAGACTC ACTTCAGCCA CTTCCAGGGA  
 67551 GGTGTCAGTA AGAACGACTG CTTGAAAGAA CTGAGCTTAA ATCAATCTTC  
 67601 ACCCTCACCA GGAGGTGTTAG ATTGTTCAA GTTGGAAACT TAAAACAGAT  
 67651 ATTATTAGG AATTTCAAC ATTGGCATGT GCCTTATTAT TAATTCTAGG  
 67701 ATGGGCCCG TGGGACACGG TGCTCCATTA ATGACAGTAT ATGCAGTT  
 67751 CAGTTGAGTT GCTGGCACAC AGTAGGTTACT TTATTCTGCT AAAAACACAA  
 67801 CTAGGGTGTAC TGCAATTAGA TTCTGACACC ACCTGGAGTT GGTGCAGACC  
 67851 CCACAGGTTA GAGGGCACAG TCTCCAACAA GACTGCCCTT ATTTCACATG  
 67901 CCCCCCACGC GCTGGAGAGT CCCAGGCCAC CTGCACCTCT GATCAACTGA  
 67951 CTGCACTGGA TGTGCCCCAC AATCTCTCA GGTGCTAA TTTGCTAGAA  
 68001 TGACTCACAG AACTCAGGAG AGTGCTGTA TTATACAAAT TATCATTGTA  
 68051 ATCAGTGTAA TAAAGAATAC AAGTCAGGAC CAGCCAAATG AAGTGACACA  
 68101 CAGGCCAGCA GAGCCAGGT GAAGGAGCAG GCTGGGAGCA TACAGGTCTT  
 68151 CTGTGCCCTT TCCTCATACA GGTGAAGTCT AGGAAAGCTT AGTTTCTGG  
 68201 TCTGGAGTCC TGTGGACCAG GGTGTGTCGA AGCCCTGGGG ATGGATGTGC  
 68251 TCCCACAGGG AGACTCTGTG GCAGCCTCGG ATTGCATCCT GGGGGCAGGC  
 68301 ATTTAAAGTG ACTGCAGGGG GGGAGCCAGG GAAAGAGACA AGGCCAGCA  
 68351 AGAGGGTGTGTT AGGGTGGACA GTGGCGAGGT CACTGGAGAG AAGGGGTGGA  
 68401 TGAATGATGA ATTCCGTTAT TGGATGTGGG AAGAGGGAGA CCCTGGTGA  
 68451 GTATGGAGA AAGACCGCTG GAAGCAGAAT GGTCTGAGCA AAGTTAGGTT  
 68501 TCTGGACGGG CATGGTAGCT AACACCTATA ATCTCGGCAC TTTGGGAGGC  
 68551 TGAGGCCAGGT GAATCACCTG AGGTCAAGGAG TTCAAGACCA GCCTGGCAA  
 68601 CATGGTGAAA CCCCCGTCCTC ACTACAAATA CAAAAATTAG CTGGGCGTGG  
 68651 TGGCAAATGC CTATAATCCC AGCTACTCAG GAGGCTGAGA CATGAGAATC  
 68701 ACTTGAACCA GGAGGTGGAG GTTGCAGTGA GCCGAGATTG CACCTCTGCA  
 68751 CTCCAGCCTG GGAGACACAG GGAGACTGTT TCAAAAAAAA AAAAAAAATT  
 68801 AGGTTCTAA TGGAGCAGAG GGGGGAGAGAT TTGATCTGGG AAAGGCTTGG  
 68851 GGAGGTTCTG TCTTGGCTGG ACAGGGATT GAAAGGATGT TGTGATGT  
 68901 AGTGGCCAGG AGGTATGGGT TAGGAAGAGG AAGGGTGAA TGGCCACTGA  
 68951 GGTCCCCCTCC AACTCGAGGG TTGTGTGATT TTGACAAGTT CTGATTCTAA  
 69001 GGACTGAGGT TGTGTAAGGC GGTGCACCTG GTTATACTTG TCTTCTGT  
 69051 GCAGCCAATC CCTCCTCGCC TACGGCCTAT CACCGCTTT CCAGCTGGTG  
 69101 GTAGTTTAT TCAATGGAGG CTTAAAAGCC CTGACTTTTG TGGCGAGTGG  
 69151 GTGGACAGTG GGGGTGGGA GCATGACTAG GAGGCAGGAG GGCCAGGAGA  
 69201 CAACTCTAA GAAATGCGGC AGCAATGAG TAGGAAAGAC AGATGGTGGC  
 69251 AGTTCAAGG GGTATAACAG CTTTTCCCTC TTTCTTAAT GATGGAGGG

FIGURE 3V

69301 GAGAAATTGA AGTTTTAAGA AGTGATAAGT GTTGAAAGTC CCAAAGGAGA  
 69351 GGAAATGAGG GGAGATCAAG ACCTTAGATG GACAGGTTCA CCTAGATAGA  
 69401 GTCACCTCTG ACTCCCAGAA AAAAGGTGAG ATAAGTAAGG AAGCCAAGGG  
 69451 CTGGGAAGGT GGAGGGGCCA GTTGTGAA TTGACCGTCC GCCAAATGTT  
 69501 AATAGAGGGA GAAGTGCACAT TTGGCTGAAT TCCACACACA CTGAATGTAG  
 69551 CAGCCCCTCG CCTCAAGGAG TTTTGTATCT AGCAGAGAGA GAATGTCTAC  
 69601 AAGAGCATGG CAGATACATC GTGGGGTCGA AAATGAGTAC AAGTGGATG  
 69651 ATTGGGGGTT ACATTTAAAG AGAAAACCAC AGCCACTGGG GGAGTTTCGG  
 69701 GAAAGGTCTT GGGAAAGAGGT GACATCTGAG AGGCACCTTC CGTGCTAGGC  
 69751 CCAGGCCAGG GTAGGGAGGG ATCATGGGCA GGGTGTGTTT TTGGAACAAG  
 69801 TTATCCCAGG GTATGTGAG CTCTTGGAA GGGCAAGCTG GGGTCAGATA  
 69851 GTGAGGACTG AGTGCTAAGA TGAGAAAGTTT TTCTTCATTT CTGTGGACAT  
 69901 TGGAGAGTCT GACATTTTC AAGTAGGGGA CTGATGTGAT TAGAAATACA  
 69951 GTTTGAGAAC CACATGTTGG CAGTGTGGGA TGAATGGGG AGGAGGGCTG  
 70001 GGCCTGGAGG CTCAGGCAGC CATCTGGTA ATGAGCCGGT AGCGGGCTGG  
 70051 GAGGTGAGAG GAGGTCTTAA ATACCACAGC TATTGGGGAC TTATAAAATT  
 70101 TTAACAGCCT TTTCAGATTA TACTCTAAAT CAGCAGACAC TTAGATCTT  
 70151 TTAACACCTT TTTCTGTTGT ATGGTATGGT GATAAATGAT GTATTAAATT  
 70201 TAAGTTTGGT TAATTTAAAT TGGTGTAAATT TGTATTATCC TTTGAGTCGT  
 70251 AATTATGTG TAGAAAATAC AGTGATGTTG GTAAATTAAA ACATTCTTT  
 70301 AACCAGAAC A CCTATTTGT GTAAATAGG AGTCTGCATA TTAGGAAAAA  
 70351 AAAAAAAAT CACATCACCT GACTGAAGTT TTCAAGCTCA GGATTCACTG  
 70401 TGGGTGTGTT GTCCCAGTGG AGGGTGTGAG GGCTGAAAGT GAGGAAGACA  
 70451 GTGATCACGC CTGGCTGGGC CTCCCTGTATC CATAACCTGCC CTCTCCCGTG  
 70501 TCCACTCCAC CTCGAAGCAG GAGGAATCTT TCAGGAATGC AAACCAGATT  
 70551 CTTGGCAGTC CCTTGCTCAT AGCTCTTCAG GGGCTACTCA TGCTCTTGG  
 70601 ATAAACAAATT CCTTGTCACT GGCACCTGCC AGGCCCTGCC CGGCCAACCC  
 70651 CTGCCACCT TACTATTCTT GTTCCCCCTCT ACTCAATCTT TGCGGGCAGA  
 70701 GATCACTTCC TCCAGCACAT TCTACCCCTTC CTTTGGGGC CTGCACTGAT  
 70751 GCCCCTGCTT GGAAATGCTC CTTCTCGTT CAGCCCTACT CATCCTCAA  
 70801 ATCTCAGCTT AAAGGCTGCC TTCTTGGGA AGGTTTGCT GATGCTTCAA  
 70851 TTAAGATAGC TCCTCCCCTG TTATAATGTG CTGTTCTCTC AGCCTCCCAT  
 70901 ACCTCTGCAC CTTGTACAG TGTTGTACA TCTCTCATTA TAATTGTTGA  
 70951 GGCTCCGCCA CCCCCACTCC CAGAATGCAT CTTCTCTGTA GGCAGAACCC  
 71001 GGACTATCCT GCCCTCCACT CCTTGCCAA TCCCAGCCCC AGGTTTCCCC  
 71051 TAGCCCCAGC CTGTGAGTGG GGCTGAGTGA CGGCACTATC CCAGAGCAGC  
 71101 TGTCCCCGCT ACAAGTTTAC CAGGCAAACC TTAAAAAAT TATTATAAAT  
 71151 GATGACCATG AAACGGAGG GGGTCGAGGG ATCACTCTGG GCAGGTTGCT  
 71201 GAAGCCTGCT TTCTGTGGGC TCTCTGCAGG GACATGGGAA TGACAGTTAT  
 71251 TCTGGGTCTC CTTCATCTCA ATGTTGTCA ACAAGGAATT TTGCCTGGGT  
 71301 TAATTATTTT GGCAGACCTT TTCTCAGTAG ATAATGCTGT GATCAGCTTC  
 71351 AGCCAGCCC GGATCAGATG ATCATCAAAG CCAAATGAGC AGTCAAAATT  
 71401 AATGACGTTT TGCTTTGCTT CATGAATATA AATACTGCAG GAAAATGGAG  
 71451 GGAATTGTCT TCCTGCCACT TTGGAGTCAT TCGTGATTTA AGTGTGCTGT  
 71501 TTTCCATGCA TGAATGTTTT CTATGAGAAC TATAAAAGTTA CTGAATGTT  
 71551 TCAGTAGAGT GACTTGTGTT GTCATGTGGT ACCTTTTAGT GCAGGATCTA  
 71601 GGGACCAGCT TGGGACTTTG TCCCTGGTTT GGTACAGTGT GATTGTCA  
 71651 GGGAGAGGAC TGCAGCTGCC AGGGGGGGT AATTCTGTCC CAACAACCTA  
 71701 TAGAACACAA GGGACAGGTG GCAGAGTGTG GGGCAATAG GCAGCCTGCC  
 71751 ACTCAGTTTT TAATCTATTCTT CTAGAACATG GTGCAGTCTA GAGACTTGCA  
 71801 GGGATTGAT GCCCACAGTA CTGTGTCTGG TCCCTGTCTGC ATGTGTGCTG  
 71851 GCCAGGGCTG TGCTGGGTAG AGGTGGCGT GTGGGGCAAG GAGCACATGT  
 71901 GCATCTGTGT GCTCATACTC AGGGTGCTTG CTCTGGAGCA GCTGGTAGTG  
 71951 GGGTCAGGTG GGGTGGACGT GGAGAGGGAG GGCTCTGCAG AGGCCCTTCA  
 72001 GGGCTGAAGG GGAAGTGGGG AGACGGGTTT CCAGGCCCTC GTCCACCTCA  
 72051 ATTCTAGCAG CTCTGCATT ACATATGGA GATCCCCCTCA AGATTTCAT  
 72101 GGAATAAAAC ATTCAATTCCA GGACTAAAAA TTTGAAAAC CTGAAGTTTT  
 72151 CCTTTCTATC AGGATGTCCA GCAGACTCAA TAATTATATA TTGTTTGCTT  
 72201 AGCATTACCA AAGCATCAGG CATTGGAAAG CATTCTGTGT TCTTTCTTCA  
 72251 TGAATCCTCA CTTAGCTGTG CAAGGGATAT GCTAGTTTA TTATCCCCAC  
 72301 TTACATATAA GGAGCCCGAG GCCTAGGTAT GCTAAGTGGAG TTGTCTGGGA  
 72351 TTCAGAGTCA GGCCAGTGTG TCTACAGAGA TGGTCTCCAA CTCACCCACC  
 72401 TACAGCCAAG TCACTGAGTT CTTGGCTCT GAGCCTGCAG AACAGTTCT

FIGURE 3W

72451 TGGTTTCTTC ATCTGCAGAA CAGGGAAAAT GAAATTTTC ACAAAATCAG  
 72501 ACATCACGTG CAAAGCAGCC AGGAGTAGAA CATTGTAGAC ACTTGGTGAA  
 72551 TGTCACTCTT AACCAAGAAA CAAGACTGTG CCTTTGGGTT CAGCTGGCTC  
 72601 ACACATTAT TTTGATGAAT TAGGTCAGTG TTTTGGTTGA TTATCACAGT  
 72651 GGTGAGGTCC ATGCAGGTAG CTGTAGGTG GAAGAACATC TCATCCTTGG  
 72701 GTCCTGCTCT GACACCTACA GGCTGTGCAG CCTGAAGATC TAGGGAAATA  
 72751 TCTGTTCTT CCTAATACCT GTAGATTAGG GATCATTGCT TCTTCCTAAT  
 72801 ACCTGTAGAT TAGGGATCAT TGACCCAGCT TTCTGGGTT TGTTGAGGTT  
 72851 GAAGTAAAAC GAATACATAC AGAAGTCCT GCTGTTCTGT GAATATTGA  
 72901 ATCTGCACCC ACTTGTAGCT TTGTGAGATC ACTCTTAACG GTAGTATTTA  
 72951 AGAACATTTG AACTCCGCTG TGGGCTCATG ATGAACCTCA TTTCTCTTCT  
 73001 GGCGGGTGGA CCTGTGCTCA TTATCATTCA ATGAATTGGC TCAGCATGCA  
 73051 GGATGGCATG CTGAGATAAA CGCTAGCCCT TACTTTAGAT TAAATACCC  
 73101 CAAAAGAGAG TGATCAACAG GAGAAAATCG AAGCCAAAAA AGATCATTAA  
 73151 AGAGTTGTTT AGGAGCAGAT ACGTGTTCAT TGTTAAAATT TCCCAGCTGA  
 73201 AAATCTAAC AACAGCACT TGAGCTTCA GAAGAAAATG CCATTTGTAA  
 73251 CATTGAGATT TGCAAGGCAT TTGGTGCCAT GTGAGTGCCG CTTGCCCTG  
 73301 TAGGTGAGTC TATGTAGACC ACGAGACAAG TATTCAATAT GCAAATTCC  
 73351 GATGGCACAT AGGGAAAGGAT TAAAAAGAAT GATTCTCATG CTTTCTAATC  
 73401 AAGTCACAAG GGGGCAAAT GTCCTTTTC ACCACCTCGA CTTTCTAAG  
 73451 AGTCCTAGG AGAGCATCTG TAGGTAATAG TTTTCATCTA GAATCTGTTA  
 73501 AATAGGTATT ATTTATTTTA CTCATATAAA TAGTTAGGAT TAAGGGTTGT  
 73551 TGCCCTGCAC TGCTAACGTG GGGGCCGGG TGCAGACCCAC TTCTCTCTT  
 73601 GGCATGCAGG TTGTTGCTG TGACTACTAC ACATTTTTCT GCACTGGCTT  
 73651 CAGAAGTTAA GCCTTGCGAG CATTCTCCT GGGCTCCCTG AGCAGCTGTA  
 73701 ATCACCTGA CCCCCAACAC TCTGCACATC AGTTCACCTC AATTTAAAT  
 73751 CCCTCAGGCC AACCGCTGTG GTCAGTCGGC ATTGCCCTAA GCTGATGGC  
 73801 CTGATTAAC CAAGAGTGGC ACACACTGCC CTCCAGCCTA GGATATGCAA  
 73851 TGTCACTTTT CTTCTCACGT TTGCCTAGCT AATTTCAGT TACTCTCCA  
 73901 GACTCATTGA TGAGGCAGGA ATCGCTTTT CTGGGAAGTT TTTCTGATT  
 73951 TTCCATCACA CGTGGATGCC CCTTCTTACCTTTCCCTAG AATGCCCTGG  
 74001 CTTATGCAGT TATGAATATT TCCACAAGGT GGCCTCATG TCAGTGCCT  
 74051 CCCTGCCCT GGCCGCCCTG CTAGCCCCGG AGTACACTAG GAGGGCGCTC  
 74101 GGGCTGCCT GCATCTCCAG GCCGGGCCACA GTCTCTGATG GTAATAGCTT  
 74151 GAACAAATGT TTGCTGAATT CATGAATTAA AACATTTT CTTTTCTAG  
 74201 TGTAGGATT ATCAAAATTA AGATTTAAAG CTTCTCGCTT CTGAGACAAAC  
 74251 ATTGCCATTA TTTAATGGTG GAGGTGAAA GGGGGATGCC GAGCTGTATA  
 74301 CTCCAGAGCT CTCTGAGGAG GGTCTAATT AGCGGGTCTC CCCATGGCTT  
 74351 CGCATCAAAA TGGCAAGGGG CTTTGAAAAA ACACCCACAC TTGAGCTCCA  
 74401 CCTAGGAGCA AAGAGACCAT ATAGTCTCTG AGGGTGAGGC CTGGTATTTG  
 74451 TGTGGTTGCG GTTTTTTTTT GTTTTTTTTT TTTTTTTGTA GTCTTGAGGT  
 74501 GATCCCAG GTCACCCAGG AGTAAGAGAG GCGGGCGAAA GTGATCAGAA  
 74551 GCGACTCCTA TTTCCTTCCT GTGGCTCGTT ATCGTCTCTC AGTGGTCACA  
 74601 GTCCTTCCC AGGCCACCC CTGTGTCCAT CTCAGGTGGG ATAACCTCAT  
 74651 GACAGAGTTT GGGAACGCTC AATAGAGTC CTTCCATAGA AAATACGTCT  
 74701 TCCATTGCTC AAGCAAGAAG AGAATTGAG CATAGGACAG GAATATTTTA  
 74751 ATCATAATAA CTGAAAACCA CCAGCAACAA TATAAACAA AAGATTGCC  
 74801 GTATTCAATTG GGAATGCAAG TTTTATCTGT GTTTGATTG TGGTGAATA  
 74851 TACGTAACAT AAAATTTAC ATTAAACCA TTTGAAAGTG GACAGTTCA  
 74901 TGGTATTCAA TTCATTCAAA TTGTTGTC ACCATAACCA CTGTCCA  
 74951 CCACACCTTT TCCATCACTG AACCAAAATT CTATGCTCAC TAAACAATA  
 75001 CTCCGTACIT GCCCCCTCCC TCAGCCCTG GTTACCCACAA TTCTACTTTC  
 75051 TGTCTCGATT AATTAGACTA TTCTAGGTAC CTCATATAAG TGGAATCATA  
 75101 TTTGCTCCCTT TTTTTTTTTTT TTTGCTTATT GAGCATAATA TCTTTAAGGT  
 75151 TCATTCAATT TATATTATGT ATCAGAATT CATTCCCTTT TAAGGCTACT  
 75201 AATATTCCAT TGTTACGTAT AGTCCACATT TCGTTTATCC ATGCATACAG  
 75251 CCATGGACGT TTGGGTTGTT TCCACCTTTT GGCTACTGTG AATAATGTTG  
 75301 CTATAAACAT TGGTGCACAG ATATCTGTT GAGTCCCTGC TTTAGATTCT  
 75351 TTTGGATGTC CAAAGTAGAA CTGTTGGATC ACAGGTAATT TTTTGGTTGA  
 75401 ATTTTTGAA GAATCACCAC ACTATTCT ACAGCAGCTG CATCATTAA  
 75451 CACTCTCCAC AGCAATGCAAG GAAGGTTCCA GATTCTCCAT ATCCTCA  
 75501 ATACTTATTGTT GCTTCTGTTT TGTTGATTAA GTTTTTTAA TAATAGCC  
 75551 CTAATGGGA TGAAGTGGTA TCTCATTCTG GTTTGATTG GCACTTCATG

FIGURE 3X

75601 TGCTTCGTGG CCATTTGTAC TTCCCTCTTA GAGAAATGTC TATTCAAGTC  
 75651 CTTTATTCT ATAAAATGTT TATGTATTTA TTTGACTTCA CCAACAGAAA  
 75701 TGGATTTCT CACAGTTCTG GAGGCTGGAG GTCCAAGGTC AGGGTGTCA  
 75751 CATGTGAGTT CCCTTGAGGC CTCTCCCTGC TCACAGATGG CCTTTCTCT  
 75801 GCGGCATGCA TTCTCCACTC TCTCCCTTT TTATATCAGT CATATTGGAC  
 75851 TTTGCCATT TTTGAATTGA GTTGTGTTGGT TTATTCAGTC TGAGCTGTAG  
 75901 AAATTCTTTA TATTTTGGGT ATTAATCCTT TATCAGATAT GCTATTTACA  
 75951 AATATTTTTC CCATTCTATG GGTTACCTTT CCCACTCTGT TAATACTGTT  
 76001 CTTTAATGCA CTAATGCTTT AGTTTGAA GAAGTCTAGT TTATCTATT  
 76051 GATTTATTTA TTTTATTTT TTATTTTTG AGATGTAGTC TCGCTGTGTC  
 76101 CCCCAGGCTG GAGTGCAGTG GCATGATCTC GGCTCACTGC AAGCTCTACC  
 76151 TCCCCGGGTTTC ACACCTTTCT CCTGCCCTAG CCTCCTGAGT AGCTGGGACT  
 76201 ACAGGCACCC GCCACCATGC CCAGCTAATT TTTTGATTTT TTAGTAGAGA  
 76251 CGGGGTTTCA CCATGTTAGC CAGTATGGTC TGGATCTCCT GACCTCGTGA  
 76301 TCTGCCGCC TTAACCTCCC AAAGTGCCTGG GATTACAGGT GTGAGCCACC  
 76351 ACACCCAGCG TACCTATTG ATCTTTGTC GTCTGTGCTT TTGGTGTCA  
 76401 ATCTAAGAAG TCACTGCTGA ATCCAACTCTC ATGAAGCTTT CCTCGTTGTC  
 76451 TTCCAAGAGT TTTATAGTTT GAGTTCTTTA GCTTTAGTCT GCTGTTAGAG  
 76501 AAAGAATAAC AAACCTTCAT TTATCCAGAA TGTTGAGGG TTGGGGCAG  
 76551 AGTATGGTCT TTTTTATAAT TAACTGTAAT AAATTTTACAT ATTTCTACAT  
 76601 TCCTCCATCC ATTAAAAAAGA TCAGGATTAG AAAGTAGGAA AATATCTAAA  
 76651 ACCATGCTGG AAAACAGAAA AGGACATGTA CAATGAAGCT TCTGGGAGAA  
 76701 ATGTGAGGCT AAGTTTGAT GGACAGACAG ACAGAGGAGG GGGATCATAT  
 76751 GAGAAGTAAG AGGATGGTGT CCTCATGGGA GCCCCCTGGAC ACCCCTATT  
 76801 TCAGAGTGCAGA GAGATCCAGT GGGCTGAAGG GGGCCGTGCC TCAGACACAT  
 76851 GCCATCAAGC CCCTACACAG CTTCCCGCA TGGCAGAGAA TGCCCCACA  
 76901 TCAGGGGGGG GTTGTGTTGGT AAGCTCTGG TCTGCGCTGA CTTCTGGGCA  
 76951 GTTTCTCCC ATTACATGG AGGGAAAGGC TCTATCACAG CCCACTGGTG  
 77001 AAGCCGCTC TGAAGTGTG AGTTCCCTG AGTAACCTCC TGGTTTTCT  
 77051 GTGAAACCG CTCAAAGTGG CCACAGGTG ACCTAAAATA AAGCCTCTCA  
 77101 CAATTGCTAA CAAAGACCAA TACAAGGCT CAATGCTGTT CAGCCTTGAC  
 77151 TTCTGTTTGC AAATATGAGT AGATAATTAA AAAAAGTAA CCAAGACACA  
 77201 GGAGTTCCCA CTGAAAGAGT ATAGGAATCA AGAGAGGGCT TTTAAATT  
 77251 CTAGAGTCA TTCTCAGATT TTAAAGATG TGGCAGTCATA AAACAAGAGC  
 77301 CAGCAGCTGT GAGGAAAGAG TCATTGGAGA GCAAGGATTG CTGTAATAA  
 77351 AAGGCATGAC TGCTGGAATA ACCTCATGTG AGAGGGTGAC AGCATCGAGG  
 77401 CTCTAAGTGT CAGTGATACT GTTAGGGTTG CAATGCAGAG GAGTGGATCC  
 77451 CAAAGCCCTC CTGGAAGAAT CCTCCAGGAA TTCTTCCAAA ATAGGAGCAA  
 77501 AAGTACAAAG AAATAGAAAAT GTCACTGGAA GGAGACTTAT AAATCCAGCA  
 77551 TGTTCACTAA GAGTTTCAGA ATTAGAAAAT AACTATATAT GAAATATCAA  
 77601 GAAAGAAACA GGGCTGGTTG TGGTGGCTCA CATCTGTAAT CCCAGCACTT  
 77651 TGGAAGGCGA AGGCAGGAGA ATCGTTGAG GCCAGGAGTT TGAGACCACC  
 77701 AGCCTGGCCA ACATGGTAA ACCCCATCTC TACTAAAAT ATAAAAATTG  
 77751 GCTGGGCATG GTGGTGCACG CCTGTGATCC CAGTTACTCG GGAGGCTGAG  
 77801 GCAGGAGGAT TGTTTGAACC CGGGAGGAG AGGTTACAGT GAGCTGAGAT  
 77851 CATCCCCTG CACTCCAGCC TGGGTGACAG AGCAAGACTC ACAGAGCAAG  
 77901 ACTCTGTTTC AAAAAAAAATAA AAAAATTAGC CAGCTGTGGT GGTGCACGCT  
 77951 GTAGTCCTAG CTACTTGGGA GGCTCAGCCA GAAGGATCAC TTGAGCCAG  
 78001 GGGATTGAG GCTATAGTCA TGCCCACTGCA CTCCAGCCTG GGTGACAGAG  
 78051 TGAGACTCTG TCTCTAAAAA TCAGAAAGAA ACAGGATACA AGTTCTATA  
 78101 ATACTTGAGT TTGAGAGTG ATTCCATTGC CAGGTTGAA TTTGGGCTCT  
 78151 GCTACTTCT CAGAGTAAGC TTTTAAGCAA GTTACTTACG CTCTCTGTG  
 78201 CTCCATTCTC TCATTGGTAA ATTATGGTAG TAATAGTATC TACCTAGTGG  
 78251 GGTCACTGTG AGGATTAAGC AGGTTAAATAC AGACAGAGCA CCTAGGACAA  
 78301 GGCCTGGTTC ACTGTGAATG TTTCTAAAAA TGTAGCTGCT GTTAAGCCAA  
 78351 CCGTCACTGC CACCACTACT CTTAGTTCTT AGAATGTACA GGTATGCCGC  
 78401 TGCCCTGTGA AAGCTTCACA GTGGTCCGG TTTACCACTC CAGTCTCT  
 78451 CTCTACCTCC TCTGCCGCAT TGCCACCTCC ACCCCCCACCC CCACCCACAC  
 78501 GCCCCGGCAT CTCTTACCTG GACCAGCAGT AACCTCCTAA CTAGCTCCAC  
 78551 AGCTTCATTT CTTATCCCCA ATAATATGCT CCCTGACCCCG TTAGGCTCCA  
 78601 GGTTAAAACA TTTCTGCAGC TCCCCCTGCA CTTCGTTTCT CCATGGCTC  
 78651 CCAGGCCCTG CATGGTTGGG CATCCCCACC CCCGAGCCTC GCTCAAGTTA  
 78701 TTTCCCTTGT GTTCTCTGTG CACTCAGCTT CAGTGGCTTG CTGTCCCAC

FIGURE 3Y

78751 TCACAATCCC GCCATCACGT GTACTTGTCT CTGCCTGGAA GGCTCTTCC  
 78801 TCAACCCACC TGCCTCTCCC ACACCATCCT TCAGAGTCCA GCTTAATCAT  
 78851 CCTTGGTCCA CCCTGGAGGG TCAGATTCTC TCACATAGCA CCCGCACCT  
 78901 TCCTTCATAG CACTCACCAC CGTGTGTGCA CCTGCACTAT TAGCCAACAT  
 78951 TCCACCTCCC TGACAAGCCT GCACCTGGC TATAATGACT CTAAGATGCA  
 79001 GATCATGACT GATTTGCTT ACCACCTTCT CCCCAGTCCC TGGCAGTTG  
 79051 CCTGGTATGT ATGTTTTGT TGAATGAATG AATGAATGAA TGAATGAATC  
 79101 CTAAGTTAG ACAACTGTG CCAGGATTTA ATAATAAAAC AATCCAAGG  
 79151 GTATTCAACAG GGGGTCAGGG GGAAACTGC TTCTCTATGA AGGAGGGAAA  
 79201 AATCAGACTA GCATCAGGTT TTTTCTGTA ACAGTGAATG ATACAGAATA  
 79251 ATGGAGAAAG GTGTTAGAG TTCTGAAGAA AAGAAATGGA TCCTAGGATT  
 79301 TTTTGTACCC CGTGAATCA TTATGTCGT GTGAGGGCAA AAGAGACATT  
 79351 TCAAATATTT TTCTCAAAA ACAAAACAACA ACAACAACAA CAAAAACAAA  
 79401 GTCACTTAAG GAAAGCGCTT TAGCCAAAGT GAATTAGAAT AAGAAACTAA  
 79451 AAAATAGGAA GATTGCTGTA CCAGATAAAA TAGTAAGCAA CAAAAGTGGC  
 79501 AATTTTAACA ATTTAAAGTG GATAGTAAC AACATGACTG TGAAGTTAA  
 79551 AGCTGTTTGT TGGAAATCTGG AAATAGGAGA AGCAAAGTGA AAATGAAGTT  
 79601 TTCAAATAAA AACGTTGGTA TATTGAAAT CCTGCTGGTG ACGGAGAGGA  
 79651 TAGGAAATGG GAGAATAGGT GCCCACTAGC AGATGTAGTC TCATTCAAA  
 79701 AGGTAAAGGG GAGGGGGGGC AGAGAGAGGC TTTAATTCTAT GATGATAAGA  
 79751 GAAATATCAG TTCCCTAAAA GCTCCTAAA CAGTTAAAAA TATTTTAAAT  
 79801 AAGGAATTTT AAAGGTAACC ACAGTGAAT ACATATAAAA CAAAACCTT  
 79851 TCAACAAATTAGGAAAG AGAAACCAAA ATGAATTCAA AAAGAAGAAG  
 79901 GAAAAAAAGC AAAAAAAAAA AAGTATGTA TGCACTTAAG ATAAAACCAA  
 79951 ACATGATAAC CACACTAAGT GTGAAAAAAA TAAATTGCT CTAAATAAA  
 80001 CACAGCAGCA AAGCTATATC TCATATAAAA GACATGTAAG AATGTGATGG  
 80051 AGATGGACAA TAAAGAGATA AACTATAGTA TCCTAAGGAA GGACAGACAA  
 80101 CAAAAGAGCA GGAGTGTCA CATTCTGTT GAACAAGGCA GAAGTCAGG  
 80151 ACAAAAATAT TGAATGAGAA GGAGAGGAAC ATTTGTATT GACGGAAACT  
 80201 ATGTATACTA CAAAAGTACA GCATTCTAC GCCATTGTGT ATGAGTTATC  
 80251 AATGAGTCCA AAAACTAAAG GCAGACATAG ATAAAATAG AAAATTGAC  
 80301 AAAACCATAA TCATAGTAGA CATGTTAAC ACACTTATCT AAATCTGACA  
 80351 GATTTAAGTA GACAAAAGGC TGAGGAAAT GGAATATATA AAAACTTGA  
 80401 TCTAATAATT ATATATAAAA CACTGTACTC AATAGACACA GAATATACCT  
 80451 TTATTCAGG TGTTCATGAA ACATTTAA AAAATTGAAAC TGTATCAGGC  
 80501 CATAAAACCT TAAAAAAGTG CTTGTATAGG CTCAAAGCAC TACACTAGAA  
 80551 ACTAACAAAT AATAAATTAC ATAATAATGA TAATTTAAAAA GTGGAGTTAG  
 80601 ATCTGTTGAC AAGTAGATGAA CCAGAGGTAA ACTGACAGCA GGGCTGGAGA  
 80651 AGCATGGATG GTTTGATCCT TGCTCAGAAG CCTGGTCCCT GGCCAGTCTC  
 80701 TCCCTGTGCT TCCCCATCAG CATTGCGAGG GAGGAACACA GGATTACAAA  
 80751 GGTCACTGGCT GGCTTATGGA AACACAAAGCT GAAATTGAAT CTCAGGTATC  
 80801 TATGCCCTTG TACCTTAGGA CAGTGTGTT TACCCACAGT TCTTTTAAAT  
 80851 GTGGGAAAGC GTGGACAGTC TTACAGGCAG GTGCCTTGAG CAGCTCCACC  
 80901 CCCGCCGCCA CCACATTCA TGTCACTTGC GCCTGAACAT ATCTTCAGGC  
 80951 TACACCAAGG TTCAAAGCCA ATGTAAGGTA AGATTTGGCT ACAGGATTTT  
 81001 GCATGCAGAA ACCATCAGCG CTGTTAGAAG CCCCTTGAA GGAGTGAGAA  
 81051 GGAGAAAAAC CTGTACAGAG GAGAGCGTAC AGGTTACTCT AGGTACTTAA  
 81101 GACCAGGACT TGATGGTAAG AGAGCTACA GGAAATGTCC AGGAAGAAC  
 81151 CATACTCTG CAGAAGAGGC AGAGGGTCGG GGGAAAAGTC CCTGGCCATG  
 81201 GAGTGAGAGT TGGACCACCC CAATCCTGCT CCTTCTCTTT TGTGTCTTGG  
 81251 GTGAAAGAGT GAAATGCCTT CCAGGTTCTG ATGTAAGCTC CTTCTTTGTC  
 81301 CCAGTGTCCA GGCCTGCACT GGTGACCTTC TCCAGCACTC TCTGTACTG  
 81351 TGCTGAACAC CCCCCGGTGGG GCCCATCTGT CTGCTCTTAC CTGAACCATC  
 81401 TAGTGCAGCA GACACTTTGC TGGTCTCTCT ACCTCAGGCA GTTACCATAC  
 81451 TGCTGCCAGA GAAATTTC TAAAATTGAC TTTTGATTAC AATCTGGAGC  
 81501 CAAGGTTGCC TGGCACAGAG TAGGGTGCAG AGTCTGGGGC ACAAGCAACT  
 81551 TGACAGCCTT GTCACCCATC ATTGCTGCTC CAGCCTAAGA CTTGGCCTCA  
 81601 CAGGTCTCCC TTCCCTCTACA TGGATGCTTC AAAGTCCCTC TCAGATTCTCA  
 81651 GTGCTCTCAA AGCCCTTACT CATTCTAGTC AGATAGCATT TGCTTCTCCA  
 81701 ACTCCTGTGC TCCCAAAGCT CTCTACTTAC ACCTTTTATA GCATCTGTGG  
 81751 CACAGCTGTG CCCATATCTG TTCTTCTAAT TAAACTAGGA GTTGCCAGAG  
 81801 GGCAGAGACC ACATTCAGTA TTGTGTTACC AATACTGAAA ACCAGCAATG  
 81851 GGCCCTAAA GAGCTCTGA ATGAGTGAAT AATATCAAA GGAAGATGAA

FIGURE 3Z

81901 AAATGAAAGA TAACATCCTT TAGATTGGTG AATAAGAATG CTCTTTTTA  
 81951 ATGATTATGC TTAACAAAGA ATGCTTACTA TGTTTCCAGG TAAATATTG  
 82001 TTTACATATA TTCATTTAAG ATTTACAATA ACCGTATAAG ATGATAGCTA  
 82051 TCTGCATTTT ACATTTGTGT AAACCAAGGC ACAGAACAGT GAAAGTACCT  
 82101 TCCTGAGTCA CTTTAATAGT AGATGGCAGA GTAAGGATTG GAATTCAAGC  
 82151 CCTCCAAGTT ACAAGCCTTT ACTCAACTAC CGTCCTTCCC CGCCACACTA  
 82201 TTTCATAAA ATAGGTCTTT AGGAAACTCT GAAGAGTTCC AGTCAGAAC  
 82251 CAACATAGCT TCCATGTGAA ACTAGGAGGT GATGTAATAG CTTCATTAAGT  
 82301 GAATCCCTGA AGAGCTACCA TTTAAAAAAT TATTTCACTA GGATTGGGA  
 82351 ATAAGTACCT TCTTCACCAT GCTCTGCTAT ATTTTCTGGG TTGGACTAGA  
 82401 GTGGCTTAGT TTGACCAATT CAGTAGTACC ATGGCCTCTT ACCCAGGCCA  
 82451 TGTCAAGCAT GTTGAECTG CCATGCCAG CATATACAAG TAAACTCTGA  
 82501 AGGGTTTATT TCCCCATCAGA GTCTTTTGG TTCTAAACTT CAGTGTAGT  
 82551 TGTGCCACT AAAAAATAAT TCATGGATAT TTTCCGTATT CAGTTAATTA  
 82601 AACCCCTTA TATTATGTTT GGTTATTAGG ATCAGATTTT CCATCCTTGC  
 82651 TCAGCATCCT GATTGTTTC TTAGAAGATT CAGTTTCTA TGATGGTTT  
 82701 TTCAGAGTAG AGATTTAAAT GAATTGTTA TAGATTAAT AAAGAACACT  
 82751 TCTTGGAAAT GCAGAGTGT TCACTTTTT CCATGGAAA TAATGACTGC  
 82801 TAAATACCTT TTGAGGAATT TTTAAAATTA GACTTTTACT TAAGTTTAC  
 82851 CTTGAAGCAA TTATAAAGTT TCAGTCAGTA GTCAGCAGAT TAACAGACCT  
 82901 GTTTAACAAC CAAGGCATGC TTTTCATTC TTCTTCCACA CCAGAAGAAA  
 82951 ATAATTCTAA ATTATAATTG GAAGTAATG CGGGAAAGCTA TGGTTCTGTT  
 83001 TACTCAGTAG GAAAGGGTAG ATTTGGAAGA AAACTCATCA TGGCTGTGAA  
 83051 AGAACACTTC ATGACATATG AGCATTCACT CTTAGAGCCA TGAAAATTAT  
 83101 AAAGGAACAC TTGCAGGAAA CAGTGGCAAT TTGGGATAGT AAATAAGCAA  
 83151 AGGAAACATT CCTTTATATA GCCTTCTTTT CTGCTTTCTA TATTTGATT  
 83201 AAATCTAGTG GAAATGATTG CTAAATCAAT TTTACTAAC CATTGTTTC  
 83251 TCACTGGAT AGTTTGAGA TGCCAGGGCT GGAAAGTACA GGGCCAGGGG  
 83301 AAAAAAAAGT AGTTAAGTAG CAGTTTCTG TTTCAATCA TCAAACCTA  
 83351 CATTACAGTA TTTTGTTTT CTTCTATACT TACCTATAAT GTGGTACTGG  
 83401 GATTGGGGT TCCAAAAAGA GTAATCTCAT TGGGAATGAC AGAGTAAGGA  
 83451 CTTCTGAATA TTCTCATCCA TAAAAACAGT GAGAACACTG GCAAAATTG  
 83501 TCAAAGTCAA CTTCTTAAGA ACTATGGAAA TTAGCTAAA GTATGCAAGA  
 83551 ATCTGGGGAG TTTTGTTTT TTTTTTAAA AAAAGGCTAA ATCTTGGTAA  
 83601 GAGCAGTATT GTAGTATATC AATTGCCCT ATTCCATCC CCTTCTCTCC  
 83651 ATTTCCCTCA TGGTAGCTTT GAAAACCAAC AGCCCTGTAA TTGTGGTGAA  
 83701 AACCAAGCAGC ATAGCAGTTA CTAGAAGGGC AGAACAGGGT TGGAACTCAT  
 83751 TCAGAGCTCC ATTTTAAGAG AATTGTCATT ATGTGATCTG TCCAGCAATT  
 83801 CCCTAGAAAA CCCTGTTCAC AAGGCTTGTCA TTTATTTGAC CTCATTCACT  
 83851 AGAGCAAACA GGCTTTCCC TGGGGCGTT TGTCAAAAAG AGCTTGTGGT  
 83901 GATTGTTTAC CATCACAGCT CCCTGAGGCA ATAACAGTTG TGGCAACAA  
 83951 GCTAAGCAA AAACCTCATT CCGTAGGGGC ATTTGAAAAG CTCTGACATA  
 84001 TTTCTGGAAG GCCTTGTGGA TGTGTAGGAC TATATGCATG CCCAGGGCTA  
 84051 TGTGCTTGTGTT CAAGAAAATC CTTACAAAGT CCTCAGTCTT CCCCCTCTTA  
 84101 GTACTGTGAG CCCCTGTGCA ATCAAGAAGT GAAAACATAAA GCAGTTGTAC  
 84151 ATTGCCTGGC TGAGTGTGTA AAGCATGCC AAATGGACAC AGAGCATCTT  
 84201 GGCAAAGACT GAGAGACTCT GGTTCCAGGC ATTTAAGGAA ATCTGTGTCC  
 84251 AATATTTAGT TGACCTCTTA AGCTAACTGA ACACAGACTT CATTGCCAC  
 84301 ACTCAGCAA GAACACAGAC TTTACAAAGT TAGTTCAAGG AAGTCACTAA  
 84351 AACGATAATG ACAACAATAA AAGAACAACT AACCTTAGAG CATCTGATTT  
 84401 CCAGAGTTGT CACATTATAT TATTTCAAAT GTTCAGTTT CAGCAAAGA  
 84451 GTACAAGACA TGCAAATAAA CAAGAAAGCA TAACCAATAC ACAAAAAAGA  
 84501 AAGCAGTTGA TAGAAACTGT CCCTGAAAAT GTCTGGACAT TATATTTGGT  
 84551 AGGTAAAAAC TTTAAATCAG ATATTTAAA TATATGGAGT CCACTAAAGA  
 84601 TAACCATGTC TAAATAGCTA AAGAAAAATG GGAGAATGAT GTCTCACAAA  
 84651 TAGAGATCAA TAAAGAGATA GAAATTATAT ATTTTTAAA AAGAACCAAA  
 84701 TAGAAATGCT GGAGTTGAAA TGTACACTAA TAAAAACAAA AAATTCAATA  
 84751 GAGGGGCTCA AAGCAGTTTC AGCAGGGCAGA AGAATTAGTG AATTTGAAAC  
 84801 ATAGATAAAAT TGATATGATC CAGTTAAGG AACAGAAAAA AGAATGACGA  
 84851 AAAATGAACA GGACCTCATA GTCTTATTAT TCACATATAC TAATATACAT  
 84901 ATTATGAGTC GTAGAAAAAG AGAGAAAAAG GGACAAAAG AATATTTGAA  
 84951 AAAAAATGTT AGAACTTCCC AAATCTGTAT GAAAAACATT AAACATCGAG  
 85001 GAAGCTCACT GGATTCCAAG TAGGATAAAC TCAGAGATTG ATACCTAGAC

FIGURE 3AA

85051 ACATCATAAT CAGTTGAAAA CCAAACATGA AGAGAATCTT GAGAGTAACA  
 85101 AAAGAAAACT GAATATGATT AACAAAGGCT CTTAATAAG CCATTGTTA  
 85151 TTAACAAAGA CTGATTCTT ATCAGAAACC ACAGAACGCTA GAAGGCAGTG  
 85201 GGATGACAGA TTCAAAGTAC TGGAAAGGAA AAAAGAAAGA TCAACCAAGA  
 85251 ATTCTGTATC CAGAAAACT ATCCTTCAAA AATGAAGGAG AAATGAAAAT  
 85301 ATTCCCAATT AACAAACACC ATGAAAATTC ATTGCTAGCA CATGTGCCCT  
 85351 ACAAGAAATA CTCAAAGGAG TCCTTAGGC AAAAGTGAAA GGATGCTAGA  
 85401 CGGGAACCTGT AATCCACATG AACAAATAAG AACACTAGTA AAAGTAACTA  
 85451 CATAGGTAAT TTGAAAGGC AGTATAATG TAATCTTTAT AGCTCTTTC  
 85501 TCCTGTTTG AAAACAGCT ACATAAACCA GTCATCAGAA ATCTGGTTG  
 85551 AGGAGCACAA AATGTATAAA GATATAATT TTATGACAAT AATAGCCAA  
 85601 ATGAGGGGCA AAGAATGGAT CTGTTAGGG GCAAAGTTT TTTATCCTGT  
 85651 TGAAATTAAAG TTGGTATTAA TCTGAACCAA ACTGTTAGAA ATTGAAATGT  
 85701 TAATTATAAT CCCCATGGCA ACCTCTAAGA AAATAACTCA AATGATAAAT  
 85751 GACAAGAGAA TTAAAATCAT ACACTAGGAA ATATTTGTTT AATAATAAG  
 85801 AAGGCAGTAA TAGAGAAATA GAGGAATAAA ATAACATTAG ACATGTAGAA  
 85851 AACAAACTTC AAAAGACAA ATGTAATCA ATTATTGTT AATTACATTA  
 85901 AACGTAACTG GATAAAAAAC CCAATCAAAA GGCAGATGGA CAGGATGTAT  
 85951 AAAATGATC CAACTATATG CTGTCACAA GACAAACATG TTAGATTCAA  
 86001 AGACACAAAT AAATTGAAAG CAAGAGAAGA GAAAAAAGTA TATATCATGC  
 86051 TAACAGGAAC CAAAAAAAAGA AAAAAAAGA ACCGGATGAA TTATATGAAC  
 86101 ACCAGACAAAT ATAGACTTTA AGACGAACCTG TTACTAGAGA CCAAAAAAA  
 86151 GTTATAATGA GAAAAGGGTC ACTCTGTCAA GAAGATATAA CTATAAACAT  
 86201 ATACGTGACT TACAGCAGAG CTCCAAAATA CACAAAGTAA AAATGACAAA  
 86251 ACTGAAGGAA AAAATAATTCA ATCAATAATC ATTGCAACTA TCAACATCCC  
 86301 ACTTCAATA CTAGACAGAA CAACTAGATA GATCAACTGG GATAGAAGAC  
 86351 TTGAAAAACCA CTGTAATCA ATTAGATGTA ACAAAACATCT ATAGAACACT  
 86401 CCACCCAAAGA AGAATGGAAT ACGCTTCTT CTCAAAGGCA CAATGGAACA  
 86451 TTCTCCAAGA TTATATACCA TCTTAGGCCA TAAAGCAGGA CACAATTAA  
 86501 AATAACTAAA ATTACACAAA GTATGGCTT GGTTTATACT GGAATAAAAT  
 86551 CAGAAATTAA TACCAAGAAAG GAGTTGTGA ATTTCACAAA TATATGGAAA  
 86601 TTATACACAC ACTCCTAAAAA AAAATCAATT TGTAAAGAAA TCACAGGGAA  
 86651 AATTGGGAAA TATTTTGAAAG AGAATGAAAAA TGAAAAAAACA ACATATGAAA  
 86701 ACCTATGGGG GTACAGGCCAG AGTAGTGTCTT AGCAGGACAT TTATAGCTTC  
 86751 ACATAACCTCC ATTAAAAAGA AGAAAGATCT CAAATCAATA ACCTAACCTT  
 86801 CTGCCATAAA AAAACAGAAA AAGAAGAGTA AACTCAAAT AAGCAGAAGG  
 86851 AAGTTATTAG ATTAGAGAAA AATACAGAAAT ATAAAAACAA TATAAGAAAA  
 86901 TCCATAAAA TGTTTTTAA AAACCAACAA ATTGGGAAAC CTTTACTTAG  
 86951 ACTGTCAAGA AAAAGGAGAG AAGCCTCACA TTACTAAAAT CAGGAATGAA  
 87001 AGCACGAATA TTAATACCA CCTTACATAA ATTTTATGAG AATACTTTAA  
 87051 AAAATTGTAT TGCAACAAAT TAGATAACCT ATATGAAAAT GGACAAATTA  
 87101 TTGGAATGAC TATTAATACT GTCTAAAAA AATCTAAATA GGCCTATAAC  
 87151 AGAGAGATTG ATTAATAAT CAACAAACT TCCCTCAGAG AAAAGCCCAT  
 87201 TTTCAGATGG CTTTACTGGT GACTCTTACCA AAACATTAA AGAATTACCA  
 87251 ATTCTTCACA AATCCTCCAA AAAATAGAAG GGAACACTTT TGAAGGAATT  
 87301 CTACCAAGCC AATGTTACCC TGATACCAA ACCAAAGACA TCACGAAGAA  
 87351 AAAAAAAAAGA AAAAAAAACA GACAGACCTA TATCCCTTTT GAATACAGAT  
 87401 GCAAAATCC TTAAAAAAA AATACTAGTA AAGTGAATTG AGCAACATAT  
 87451 AGAAAGGATT ATACACCAGT AGCAGGTAAG ATTTATCCCT GGAATATAAG  
 87501 ATTATTTCAA ATATAAAAGT AAATCAATGT AACACACCAT ATCAATACAA  
 87551 TAAAGAACAA AAGCTGCACA ATTATATCAG TAGATGCAGA AAAAGCACCCT  
 87601 GACAAAATTC AGCATTCTT CATGATAAAA ACACTAGAGA GAAGATCAAT  
 87651 AAAACTAGGAA TAGGAGGGAA CTTCATTTAT TTGATAAAGC ATATCTATGA  
 87701 AAAATTCCAA GCTAACATT TTAATAGTTG AATGCCGAAA GCTTTTCCC  
 87751 TAAGATCAAG ATAAGACAA GATGACCCCT CTACCCATT GTATACACCA  
 87801 TTGCACTATA GCTTATAAAA GGCATCCAGA TTGTAAGGG ATTAGAAAA  
 87851 CTATCTCCAT TTATCAATGA CATGATCTTT TACATAGAAA AATCCTAAGG  
 87901 AACACACACA CATAACTGTT TTTTGTGTT TTTGGGACAT CTCTGTTGAA  
 87951 AGATTTCTT GAGGGTTTAT TTACATGGCT GTTGGACAT CTCTGTTGAA  
 88001 AAGGAAAACT CTTTTTTTTT CTTTTTTTTA TTATTATTAT ACTTTAAGTT  
 88051 TTAGGGTACA TGTGCACAC GTGCAGGTTT GTTACATATG TATACATGTG  
 88101 CCATGCTGGT GTGCTGCACC CATTAACTCG TCATTTAGCA TTAGGGTATA  
 88151 TCTCCTAAAT GCTATCCCTC CCCCCCTCCCC CCACCCCCACA ACAGTCCCTG

FIGURE 3BB

88201 GTGTGTGATG TTCCCCCTCC TGTGTCCATG TGGTCTCATC GTTCAATTCC  
 88251 CACCTATGAG TGAGAACATG CGGTGTTGG TTCTTTGTCC TTGCGATAGT  
 88301 TTGCTGAGTA ATGATGGTT CCAGCTTCAT CCATGTCCCT ACAAAGGACA  
 88351 TGAACTCATC ATTTTGATG GCTGCATAGT ATTCCATGGT GTATATGTGC  
 88401 CACATTTCT TAATCCAGTC TATCGTTGTT GGATATTGTT GTGGTTC  
 88451 AGTCTTGCT ATTGTGAATA GTGCCCAAT AACACATACGT GTGCATGTGT  
 88501 CTTCTAGCA GCATGATTAA TAATCCTTG GGTATATACC CAGTAATGGG  
 88551 ATGGCTGGGT CAAATGGTAT TTCTAGTTCT AGATCCCTGA GGAATGCCA  
 88601 CACTGACTTC CACAATGGTT TTACTAGTT ACAGTCCCAC CAACAGTGT  
 88651 AAAGTGTCC TATTTCTCCA CATCCTCTCC AGCACCTGTT GTTCTGAC  
 88701 TTTTTAATGA TCACCATTCT AACTGGTGTG AGATGGTATC TCATTGGGT  
 88751 TTTGATTTCG ATTTCTCTGA TGGCCAGTGA TGAACACACA CAACTGTTAA  
 88801 TGCTAATTAA ATGAGTTAG CAAGACTGCA TTGATACAAA ATCAATATAT  
 88851 GAAAATCAAT TGTATTTATA TACACTAGCA ATGAACAATC TGAAAATAA  
 88901 ACTAAGAAA TTTCATTAC AATAGTGTCA GAAATAATAA AATGCTTAGT  
 88951 AATAAAGTAT GACTTACACA GGAAACTATA AAATATCACT GAAATGAAGA  
 89001 ACTAAATAAG TGGAAAGATA TGTCATGGA TTAGAAGACT TAATATTGTT  
 89051 ATGGGTCAAG AGACTTAATA TTGCTAAAAT GGCAATATTG CCCCATTAA  
 89101 TCTACAGATT CAATGCAATC TTTATCAAA TTCTGGCTGC CCTTTTGTA  
 89151 AAAATTGACA AGGTATTTGT TTCTAAAATT GATATGGAAA GTGATGAAC  
 89201 CAGAAAGAAG TTAGGGGATT TATACTTCCC AATTTGAAA CTTATAAAAC  
 89251 TACAATAATG CCATCACCAAG ATGGAGCGAC ATGCACCTTA TAGTCCCAGC  
 89301 TACTCAGGAG GCTGAGGGCAG GAGCATTCCCT CGAGGCCAGG AGTTTGAGAC  
 89351 CAGCCTGGAC AACATAGGAA GACCCTGTCT CAACTTAAAG AAAGCAAAC  
 89401 ACAGTAATAC AGTGTGGTAC TGACATAAGG ATAGCCATAT AGATTAATGA  
 89451 AATAGAACTG ACAGTGTAGA AATAAATCAT TTATGGTCAG TTGATTTTG  
 89501 CCAAAGGTTTCA TAAGACAGTT CAATGGAAA AAAAGTCTTC TCAAAAATTG  
 89551 GTTCCAGAG TTATGAATAT GCTAAAACCG CCCTTAATCA TACCATATAA  
 89601 AAGGACAAGT TTAAATATAT GTGAATTATA TCTCAATAAG GAGGGGTGGT  
 89651 GGGCAGGAA GGTGGAAACA CACAAACATTG CAAAAGGCAG TGTATGCTTT  
 89701 GCTGGAAAGA GGTATGAAAG GAGACTGGC CGGCTCAGAA TTAGAGGAGG  
 89751 TCCCACACAT ATCTTTCTTT CTCCAGCAAG TTCCATGACT GCACTGTGTG  
 89801 TATATACTTT TTAATATGAA AGTTGAAATC TCTTTTCTT ATTGTTAAC  
 89851 GTGGGGGGGG AAAGAGAGGC TTTGAAATT ACCTGATAGC TATTGGTAAC  
 89901 ACTAAACATG TGTCAAGAGC CCAATACTC AGGACAACTA CCCAGAGTGA  
 89951 TTATTACACA GAAAAGCTG TTAGTATCTT TCTTGTGGCC AAACATATAA  
 90001 AGTCTTGTG CAAAAGTC TCGTTTAGAA ACTGGAACTA GTTCTTATTT  
 90051 GTAACAGCCT TGCTGAGATT AGATGATGTA TAGTTGGAGA AGAGAGAATG  
 90101 TGGCAGTGGG ATGAGCCTAT GGAGGTGAGG CTAATTGAT ACTTACACAA  
 90151 TAGAAGAACT GAGAACACT ATTGATACTG TTAACGTGG CTGAAGGAAG  
 90201 AAGAGGAGGC TTGCTGTACT TCTTCCTTCA ATATTTCT GCCTTTTTG  
 90251 TGGGGGTGGG AGCCTTATTAA ATATGCCAG GATCTCCAGG ACTTTGTTGA  
 90301 ATAAAAGTCA AGAGCAGCCA TCCCTGCCTC ATTCCAATCT TCAGGGATT  
 90351 AACACTCAGT CTTTCACCAA TTAAGTATAA TGTGGCATT AGGTATTTT  
 90401 GTAGATGCC TTATTAAGTT GAGAAAGTTC ACTTCTAGTC TTAGTTGCT  
 90451 GAGAGGCTTT TATTTCTCT TTTCATTATT ACTAGATGTT AGATTTGTC  
 90501 AAAGCATTTC CTCCAGCTAT TGTGATAGTC AGATTTTTT TTTTAGCTG  
 90551 CTAATATGGT GAATTACATT GATTGATTT GAAATTAA ACCAACATTG  
 90601 CAATCTGGAG ATAATCCTCA AGTGGTCATG ATTATATTGTC TTTTTATTG  
 90651 TGAATTGAT TTGCTAAAAT TTTGAGAATT TTTCTGTGAT CATGAGGATT  
 90701 ATTAGCTGT AGTTTCTTG TAATGTTTT GTCTGGTTT GGTATCAGGG  
 90751 CAATGCTGGT CTTACAGGAT AACTTGAGAA AGATTTCCCTC CTTTCTATT  
 90801 TTCTAGAAAA ATTCTATGTA AATTGCTGTC ATTCTCTTCC TAAATGCTTG  
 90851 GTAGAATTAA CCAGTGAAGC TCTCTGGTCC TGGAGGGTTG TGTGTATGTG  
 90901 TGTGAAGAT TTTAATTATA AACTTAATT ATTGATACA GGGCTATTC  
 90951 ACATTATCTA TTCTTCATG AGTGAGCCTT GTAGCTTGTCT TTTCAAGGAC  
 91001 TTTTCTATT TTGATCTAAG TTGTCAAATT TACTATCATA AAAAGTTGCT  
 91051 TATAATAGCC CCATATTATC ATTAAAGGT TTGAGAAC TATCTTTTC  
 91101 ATTTCTGAGG CTGGTAATT ATTCTCTC TTTTCTGTA TAAGCATGGG  
 91151 TAGAGTTTAT CAATTTTATT AACTTTTTT TCCTAAATGA CTAGGTTTT  
 91201 ATTTCACTTA TCTTCTCAAT TGTTTCTAT TTCTACTTTA GTCGTTCTG  
 91251 CTCTCATATC TATTAGTATA GTCGTTCTC CCATTTACTT TGGGCTTCAT  
 91301 TTGCTTCTT TTTCTAATT ATAAAGGTAG GAGCTTAGGT TATTGAATC

FIGURE 3CC

91351 AGACCTTCT TATCCAGTAA GTGCTTAATG TTTCTAAAA ACTAGTTCC  
 91401 CATCTAAACA CTCCCTTACA TGTATCCTAC ACATTTGAT ATGTCTTGT  
 91451 TTCACTTCA TTCAGTTAAC CACTTATCA TTTCCCTTT GATTCTTCT  
 91501 TTGGTTGTA TTTTGCTTAG AATTATATTG TTTAGTTCC AAATATTGG  
 91551 GATATTTCC AGGTATCTT GTATTTACTG ATATCTATT TAATTCCACT  
 91601 GTAGTCAGAA AACATATTAA GTACAATTAA AATTATTAA AATGTATTGA  
 91651 GACAGATTAA TGGCCCAGAC TATGGCTAA CTATCGTGT AATGTTCCA  
 91701 TGTGTACTTT AAAAGATTGT ATTCTGCTGT TGTGGGGTGG AGTGTCTAT  
 91751 AAATGTCATT TAGGTGAGT TGAAAATGTT ATTTAAGTCT TACATATCTT  
 91801 TCCTGAGTTT TCAAGTTGT AAATTTTCA GTCGTCATT CTTCAAATTT  
 91851 TTTTCCCTGT CTCCCTCATT CATTCAACCTT TGACTCTGTT CCTGTGACTC  
 91901 TGTACGGTGT GTGTGTGTT GTCTGCCCTT TTCTGTTCA TTTTGGTAGT  
 91951 TTCTGTCATT ATGTGTCGA GTTACTCAA CTTTATTCT GCAGTGTCTC  
 92001 CTCTGCTGCT AATCCCACATC AATGTATTAA TCATCTCAGA CATTGTATT  
 92051 TTCATCACTG AGGTGTCCTG GGCATCAGGC ATTTGAATT TTATGTTGCT  
 92101 AGATACTGGA TGAGAGAGAC ATATATGTAT ACACACAAAC ATACATAAAA  
 92151 ACACATATAT ATGTAATGTT ATACTATATT ATAAATACAT ATGTATTCTT  
 92201 GAGCTTGTA CTGGGACACA ACTGAGTTAA CTTGGAAACA TTTTGATCCT  
 92251 TTCCAGGCTT GCTTTGAAAG TTTGTTAGGC AAAACCATCT CAGCCTCTAG  
 92301 TTTAGGGCTA ATCAATTGAA CCTTACAAACA GGCACGATAA CCTTCCAAGT  
 92351 TCTCCCTCAG GTGCTCCAG TGTTACTAGG TAGCTCCACT CTGGCTACTG  
 92401 AGAATGGAA CTAGTCCCTC CCAGTAATTG ATTCAACCTGC TCCCTGCCAG  
 92451 TGGTTCTGTA CCTGGCCTGA GGTAGTGTG TGAGCATTG CTCTTCATAC  
 92501 TCAGTTGAAG AGTTGAGGAG AGCTGCTAC AGATCAGCAG AGTTCTTCC  
 92551 TCTCTAGTAC TCCACCCCTGC ATATCCTAGT TGTCTTGGCC TCCTCAAATT  
 92601 CTCAGTTGTT TCCCTCAATTG AAGGGGACTG CAGAGCTTC CGGGTTCCCC  
 92651 TCCCTGTGGT GTAGCCTGAA AACATACCTC AGGCAGGAAG CTGGGGCAGT  
 92701 TGTAGGGGTC ATATTCTCTT TTTCTCAGAG ATCTCTGTCATGCTC  
 92751 TTTTCCAATG TCTGGAAACT TTTTCAATC ATTGTTGTCATGCTC  
 92801 ATTTAAACAA AGTGAGGAAA AACCAGCTCC TATTGCAATT TTGTCCAGAA  
 92851 ATGTAATAG CTTGTTGGAC TTTTAAAGTC TTACAAATT TCTACTCAGT  
 92901 AATCAGTAAT CATATATGGA GGTAGGCCCT ATCCCTCTGC CTGAGAGGAA  
 92951 ATAGTTATTC CTGAGTATCC ATAGGAAATT GGTTCAGGA CTGCTACTCA  
 93001 TACCAAAATC CATGGACGCT CAAGTCCCTG ATATAGTGT TACATATAAC  
 93051 CTAGGCAGAT CCTCCTGAT ACTTTAAATC ATCTCTAGAT TACTTACCTA  
 93101 ATACAATGCA AATGCCATGC AAATTGTTGT TATACTATAT AGCTTTAAAA  
 93151 CTTGATTAT TTTGACTGGC TGCTGTAGCT CACGCCCTGTA ATCCCAGCAC  
 93201 TTTAGGAGGC CGAGGGGGGGC AGATAACCTG AAGTCAGGAG TTCAAGACCA  
 93251 GCCTGGCCGA CATACTGAAA CCCCCTCTCT GCTAAAAATA CAAAATTAGC  
 93301 CAGGCCACG TCTGTAGTC CAGCTACTCG GGAGGCTGAG GCAGGAGAAT  
 93351 CACTGAACC CAGGAGGCAG AGGTTGCAGT GAGCCGAGAT TGTGCCACTG  
 93401 CACTCCAGCC TGGGCAACAA GAGTGAAACT CTGTCCAAAA ACAAAAAGC  
 93451 CCTATTATTT CTTGTTGTAT TGTCACTTTT TTGTTTTATT TTCAGATATT  
 93501 TTTAATCTGA GTTAGTGTG ATCTGCAGAT GCATCTGCAG ATACAGAGGG  
 93551 TGACTGTGTA TCCTCCCCAC CTAGCTCTGC TGAAGAAGTC AGGAAATCCT  
 93601 GCCTCTCAG TGAACAATCA TTTTATTG CATTTTTTTT TTTACTCAGC  
 93651 TGACCAAGGC AGAAAATCCT ACTCCCATGA CTTCGTAAG CATCTCCAAA  
 93701 GTAACCAACA TCTTTAAAGA TAACGAATCT CACTAAAAAA GGAAAGATAT  
 93751 AATACTTGAA GTATAAAATAC TTGGAATTAC CCAAGAAAAC ATCTTAGGTT  
 93801 GGAATCAAT GTGGATTAGT TCCCTTTACT GTGATTTCAG AGGGGAGAAC  
 93851 TCTTTAACTC TGCCCCCAGC TTACAGCGGG GTCAAGATTCC CAAAAGTAA  
 93901 CCCAGGGGTT GACCTAGTTA ACATGCAGTC TCTCTGCCA GCTGTGACCT  
 93951 GCTTCTCTTCA AGAGATCAC TGAGCAAAGG AAATTGCGTT AGCTGATTTG  
 94001 GGGGCATCTG AATTGTCCTC CTCCACCCCT TTGTTATTAGA GAATAGAAAA  
 94051 ACACCTGGGT ACTGTGGAGA GCCACAGGCT AACATGTCTC CAGGGTGTG  
 94101 GCCTTCAGG TGGGCACCAT TCTCTAGTGA CACCAAGGAAA GGAGACCTTG  
 94151 CTGCAAAATG ATGTATAGCT TCACAACTGG CTGTTAACTT TACATAAAATT  
 94201 GTAGATTTG CCATGTCATT CTGTTGAAAG CGCTGGAAGG ATATTCTGT  
 94251 GCTAAGGAAA GCAACAAAG AATCTGAATC CTTCAGTGGT CGTGATGGTT  
 94301 AATGTGTTAA AGTCTTAGGG GAAAATGAAG GAAATCAGAT CCAGGTGGCT  
 94351 CCATATCATT TCCAGAAATC ACCTCTGCAC AATTGGATC CCATGTTTT  
 94401 GAGAGAATGG GGAAATACAA CCAGTACCT GAAGCCATGT GAAGAATGTA  
 94451 TCAGGAGTTT CAGTATGACT GAGAAGGGTA GGCTCTCATC TGAATTAAA

FIGURE 3DD

94501 AAAAAAAAAA AAAAAAAAAG GATAAAGCTT ATTTATAAGC ATGTGGAAA  
 94551 AAGCAAGAAA TCTTTAACCA CTAAAATCTG ATCTGACCTG TTGGAAAGGA  
 94601 CACTACGTTA TCAATTGAA CCTCTGGCTT TTGTTGAGGT GTCTGGTGGT  
 94651 TGTCTAGTT GTGTCTAAGG AAGGCTGTGG ACTTGTACCC AGAGTTGCTA  
 94701 TCACATGTAG GTGTCTGGC TTTGCTACCT GGAACCTTCC CAAACCTTT  
 94751 ACATCTGTCA ACCAGTATTTC TTTCAGCCAT AAATGGTGGC TGGCATCACC  
 94801 TGCCCCCTCAT GATCACACTG ACAATAGTAT TTTTATTAT ATATTGCAGT  
 94851 ATCTTTGAA CAGTGCTTTG CAGTCAGTGG AGTCTTCCA TACCTCAATT  
 94901 TTTCATCAAA CATTGAGTTG AAGTGTACA CTTCTCTCGC AAATAAAGAA  
 94951 ATGGGAAAGT TAGAAAATCA AGAAAGGTTA AATGAGTTGG CCAGTGTCCC  
 95001 AGGGGCAGGG ACCTAGGCAA AAACAAAAGG CTTCTAATTG CAAATCCAGT  
 95051 ATTCTCTGCT AAAATGTGCC ACCTCCCTCC CTTTAGGGTT GGTGGAGGTA  
 95101 TCGATACTGG GGCTAGTCCT ACAGCTAATG CTTTATGATT CTTTGTCTG  
 95151 CTTCACTCAG CACCTGCTGT ACCATGTTAT GTTGTAAGT GGCTTAGTGT  
 95201 TAACTTTCT CCAAAAGGCA GCAGGGCTG GAACAGGAGA CTGGCCCCAGT  
 95251 CTGGCATCTG GAGAGGATGG TGGTTGTGGT GTTTTCACAG CTCCTCCATT  
 95301 ACCACCTGGT ATCATTAGT ATTACTTGC AAACTGAATC ATAAATCAAC  
 95351 TCATTTAATG TAGAGAAGGG CAAAAGTGC TGAGAAATGT TTTGTGGTT  
 95401 GGTGCCCGGA GCTTCAACTC TGGGAGGGTG CCTGACTTGA CAGTATCACC  
 95451 TTAGTCACTA AGGAAAAGA GATCCAGGGC TTCAGACCTT CAAAACAATT  
 95501 ATTACTTGCT GAGATGGCAA AAACAATTGT AGAGTGTCTC AATGGCTGAG  
 95551 CTTAACACAG TTTGTTAACAC TACAGATTAA ATACGAATGA TTCTTTTTTC  
 95601 TTTGAGACAG GGCCTCATTC TGTTGCCAG GCTGGAGTTG CAGTGGCACA  
 95651 GTCATAGCTC ACAGCAGCCA CAACCTCATA GGCTCAGGCCA ATCCTCCAC  
 95701 CTCAGCCTCC TAAGTAGCTG GGACTACAGG CACGCCAAC CAC  
 95751 ACCCAGCTAA TTTTGTATT TTTTGTAGAG ACAGGGTCTC ATTATGCTGC  
 95801 CCAGGCTGGT CTTGAACTCC TGGGCTCAAG AGATCCTTCT GCCTTGGCCT  
 95851 CCCAAAGTGC TGAGATTACA GATGTGAGAC ACTGTGCCA GCCAGTAATG  
 95901 ATTTTCGTA TGACCAAAC ATTGAAGAAA ATTACACTT ATTTTTGGTA  
 95951 AATGAAATAC CAAAAAAAATTTA TGATGGCTG ATATCTCTG  
 96001 CACTGATTTC TGCCCCACAT ACCCTTTTA GATGAAACCA AATTAGAAAT  
 96051 ATAAACCGA TGATTAAAAA TTAGGTATGA TTCAATTTC AGCTAATCGG  
 96101 CTTTACTTCT GTTGCCTCC CTTCTAAATG CAAATGAAT CCAAGCAGTG  
 96151 CTGGATTAA GGAAGCATAC ATAATTAAATA TTACAGGGCA GGCAGGAGAG  
 96201 CTGGCAGTGT GGTCTCATAC CCCACATGTA GTTAGGTAAG CATGTATGTT  
 96251 TTTCAGCTGC ATTTATTCTC TAGTTATTCC TAGTGGAAA TGTGGGGGT  
 96301 TGATGATCAC TGTGAAACAG CAGCTTAAATG AATTCAACCT TTATTATCAA  
 96351 CAGACTAAC TTCCATTGAA GCGTAGATGC TCCGTGAC GCCTTTATTT  
 96401 TACACGGAAT GTAAAATATT GTAATGACTG ATTTCCCTT GAGACTGTAA  
 96451 TACAGGTAAT GTTCTATTTC AACTTGTAA ACCAAGACCT GACACACAGT  
 96501 AGGTATTAA AAAACTGTT TGATGTGACC AAAATTATAC AGAAAAAAAG  
 96551 AGAAAGTACAC CAGGATTAA AAGTCTCTT TTTTTTTTAA TTTTCACAA  
 96601 AGGATTGCT GTAAGTCTTC AAGTCATT GTCCAATCCA AAAGCTGTAT  
 96651 TTAAGCGTCG TGGATCCAG CCAGGGATGC AAGAATCTGA CTTTCTCAAA  
 96701 CAGATAACAA CAGTCGAAGA ACTGGAACCG AAAGCAAATA ACTGCACTAA  
 96751 GGTATTCTT ACACTTGTGC TGCCGACCT CGAGTGTAC CATGAAGAGT  
 96801 GCGCTACCCA AGCTATTTC TTCCCTTCA GTTCTCGTG TGGCACACTC  
 96851 GGACAGAGAA GTTAAATCTA GCCAAGGAGC CAAAGTACCA CCTGGACACA  
 96901 GTGAAAATTG AGGTATAAAT TGAAGCAGCA ACTGGTGCAG TTTGTCCAGC  
 96951 CAGTGGATCC ATATGGAAGA GGATGTTGG AGTTTAGGCT ACAGAGCATT  
 97001 CAGGTATTGT TTGTTTACT TCAGTACAGC AGCCCTTCTT GTCATCTGAT  
 97051 GGACATCTGT TAAATGGAG CTTGTCAGTT AACATAAGCT AATTGGATGG  
 97101 TTGGTACAAA ATGTATGTT TGTCTTCATT TGTCTGCAT GTTTCTCTA  
 97151 CAACAACTAA ATTGGAAGAT TTTTTGTAC AGTGGCGATA CTGCAAGATA  
 97201 CCACTCTTGA GTATATATT TTTCTTTTCA TCCAATTGTC CTTTATAATT  
 97251 GGTAGACTTG AACAGGTTGG TAGACTTGAA CAGGTTTTA AAACAGACAA  
 97301 GTATTTGTC AGCTAACGTT TCCTGATGAT TCCTGACTTT GCAAACTAA  
 97351 GTAATTGTTG GAAGGTTAGT GGCAGTATAC ATCATAGGAA ATAAAAACCC  
 97401 ACAAAATGAAA AGGTCTATGG AGTCATGTTT AATGAGGGAA AATAACATT  
 97451 TGTCAAACTT AGGCACCATCA AAATGTAAAC ACAATTACTG TCATAAAACCT  
 97501 AGATATACCT TCAAGGATTG AAGATTGAAA GTGGCTTTGT TTTAGTTAGT  
 97551 TACCCCTGTTT GCATATAGTG CAGAAAAAGG TCTTCATGTT AGCACTATGT  
 97601 ACATTAAGAA GAGATCCAAA TTACAAGAGA GGCAGATAAA ATTTGAATTC

FIGURE 3EE

97651 TTTAAGCATT CATTAAACGA AGTTTGGAG TAACATCCAC GTTTATCTTC  
 97701 CTTTCACTAA TCACGTTCCC TGTTAAGCAC ATCATAACAA CAGCACAGTG  
 97751 AAGTGAATGA TGAAATAAGA GCATTTGAT AACTAGAAA ACAGTGCTCA  
 97801 GTGAGACATT TACATTCTAT TTATATGATT AAACATTGAA TCATACAGTA  
 97851 CCTTCCTACA GGATTACTGG CTAATTTGG GGTGGGGTTT ATACTATTAG  
 97901 AGGTATTACT AACATGATAA CTACTCCCT TATATGCAAA CATTAGAGCT  
 97951 ATAATTTAT TGAGAGGAAA ACTGATTTG CAAGTTGAGC AGCTTCTCAA  
 98001 ATAATGCAGT ACATGAAATC ATGGGAAATA TGAGCAAAGC TGCCCTTGAC  
 98051 ATAAAATGAT TTATCAACCT GCTTTCAACC ACATCAAATT GAATCAGTAC  
 98101 AGACCAACAC GGTCAATCAG ATCATTCTTA ATATGAACAA ATGGGTAAAA  
 98151 AGAAAAAAA TATGCATATG AATAAACAGG GGAACTAGAT GCGTTTCAGC  
 98201 AAGGAATGTC AGGTGGTAGT TCTGGATGAA ACTTGATTTG CAGTTTCAT  
 98251 TTCCACAGTT GTGTGCTGAG AGTCTGACCT GATGAGCTTC CAGACCATCC  
 98301 TGCTGTTGTG CTGGAGGGCT GGCCAAAACC TGCAGTAGGG GTTGCACTAC  
 98351 TGATACTCAT GCCAGCCATC TGCTGATTCA TCTGTGAAAC ATATAAAAGG  
 98401 CTTAGTTCAA GAGGCTTACT TCACTTTAA TTCTTGTTC TTTAGCCACA  
 98451 CAGTTGGTCA TTTTTTCATT AATGTGACAA CTAGTCCAAG CACTGGAATA  
 98501 AAAACAGAGT ACCATACAAA TATTTCTAA AGCAAATAGC TACTTTGTT  
 98551 CCTTCTTTAT CTACTTTCTA GATACAGTTT CCCCCAAAGAT TAACCACAA  
 98601 TTACTTAAAA AAAAATACCA AAGCAATCTT GGGATTTAA TGAGTCCGCT  
 98651 ACTCTAACTA ACTTTCACCT ACACTAGGAT ATTGTGCTTT AACTACTAAG  
 98701 GAGTAAGAAA ATTTTAGGAA GTAAAATAGT CTAAAATTAT CCTATAAACT  
 98751 TTGTATGATA GATATTATTC TCTATTAAA TCTTATATAC TTCTAAATA  
 98801 TTTTTAAAGT GGTCAAAAG CATTATTTTC TCTCGCTGAT CTAACAAACAT  
 98851 AAACATCTAA AATTATTTT CATTGTATGC AATAAAGCAT AAGATTACAT  
 98901 GTATTTTCTC TCAAGACTGG AGTCAAATAT ATATATATAT AAGCATCTA  
 98951 ACCCTGTGAT TCTCTTACTT CCAAAATTGG TGATAAGAGA AGGAAAGGCA  
 99001 AGATTACCA TATAGTGAGT GGGTTTAAAA CTTACACTCA GAGTTAGACT  
 99051 GTGTTCTTAA TTTAATACAT TTGACTTGAC TTATTTACAG TTTCAAAGAC  
 99101 ACTAACATAA ACTACATCAC TAATCAGGC TAAGTGTCTG AAGAAGCAGA  
 99151 TCACCGTCTTC ATACCTACTA AAGGACATT TAACCACCTT GTCTGGCC  
 99201 AGTAGATTGC ACTGATGGAG TGCTGGAGAA CAGCATCACC CTTCTGCATT  
 99251 ATCTGGAAGT AAGAGCCAGT ATTAACCTCCT TCCTGGTTCA TCTAGCACCT  
 99301 TAACCTGAGC TGGGTGTGCT TCAGCATGTT GACCATGTGA CTGACACTTA  
 99351 GCACATACAA TTTTTTAGAT TCCCAGCGGG TAGAGACCAA TGTTTACCT  
 99401 ATATTCTTGT AAATGGTGGT AGCAAATTA ACTGTGATAT ATAGTGATTG  
 99451 TGCTAATGTT AGAAATCACT CTAGACTATT CCCTGAATGC TCTAAAGGTA  
 99501 AAACAAGTGA CAAACAGAA ACCAAGATTG CCAAAATGCT GGAGGAACAT  
 99551 CAATGGGAAG TGTAAAAGGA AGAAGAGTGG GAGCATGAAC CTCTCTAAGA  
 99601 GCCTTTGTCT GTGCAGCTAG AGAAAAGTC GAACACAGCA CCTGAAATAG  
 99651 AAATGTTCTA TCTCAGCTCT AACTTAGGTA GAAATAGGAT TTTATAATAT  
 99701 GAGGGGATGT CTGGTTCACA CCTTATGGGA ATTGAATCTT TTTGTACTCT  
 99751 TTTTAAACAT AAAAGTCATT ATAGGGTATG TAAAAAGAAA ATACAACCTT  
 99801 ACAAAAGTTT CTCAACAAAA AGAATTGTTA CAGAGCCATG GGGCAGTAAT  
 99851 CATCCGACCT GAAAAACAGC CTTAGATCCC TCATAAAAATA GTGCTTGAG  
 99901 AATATGAGGC TAGATT (SEQ ID NO:3)

**FEATURES:**

Start: 2614  
 Exon: 2614-3204  
 Intron: 3205-64312  
 Exon: 64313-64457  
 Intron: 64458-96602  
 Exon: 96603-96751  
 Intron: 96752-96831  
 Exon: 96832-96915  
 Stop: 96916

**CHROMOSOME MAP POSITION:**  
Chromosome 6

**FIGURE 3FF**

**ALLELIC VARIANTS (SNPs) :**

DNA Position	Major	Minor	Domain	Protein		
				Position	Major	Minor
899	A	G	Beyond ORF(5')			
1196	C	G	Beyond ORF(5')			
2600	A	G	Beyond ORF(5')			
4797	A	T	Intron			
6461	C	A	Intron			
6543	-	T	Intron			
8419	G	A	Intron			
8636	T	C	Intron			
17222	-	C G	Intron			
49439	A	T	Intron			
49612	G	T	Intron			
69716	G	A	Intron			
69742	G	A	Intron			
69920	C	T	Intron			
70038	C	G	Intron			
70956	C	T	Intron			
71021	A	C	Intron			
71547	G	C	Intron			
71592	C	G	Intron			
71601	G	A	Intron			
72024	C	G	Intron			
72161	A	G	Intron			
72259	C	T	Intron			
72363	T	C	Intron			
72639	G	C	Intron			
72698	T	C	Intron			
72716	C	A	Intron			
86903	C	A	Intron			
89261	C	T	Intron			
95175	T	C	Intron			
96648	T	G	Exon	261	V	G
99242	A	G T	Beyond ORF(3')			
99349	T	C	Beyond ORF(3')			
99443	A	G	Beyond ORF(3')			
99867	T	C	Beyond ORF(3')			

Context:

DNA  
Position

899           TTCAGGGTAGGACTGGGAGAAGAGGGAGCTGTCAAGAAAAGCTGGAGAGGCCATTGCCCGA  
GAGCTCTCAGTTGCACAGAACGACAGTCGGAGAGAGATTTATTTGTGAACAAGCCCGA  
GAAAGGCAGACAACCCAGACAAGATGGGCTCAGAAATTATTTATCATAGGCTAGGGCAGA  
ACAGTCTGGAGCTTCCTCTGTTGCAAGCACTTCCCTGGGACCTGCCTGGGAAGCAC  
AGCCCTTCTCCTGGTAAGTTACAGAAGGTCAAGCACTCAGCTAGTAGGCCAGCTAGACA  
[A, G]  
CAAAAAGTGTCTAAACTAAGTGCCAATCTGGGTCTTCCAGACCCCTATCATGG  
TTCTATTCTGTATGGTACACTCTGTTGATTCAATCGCACCATCTTATATGTAGGAAG  
GCCAAACCGGCCGGCTGTGTTGGGTGGGATTCTGCAGGCCATGCAGTGAGGACGCCAC  
TAGCTATAGACACACGCAGGAGACCCACGTTCTATTTCCATATGCCACTTGCCACTGACC  
TCAGAGAAATCATTAAACCCCTGAACCTCAGCTCCTTATCCTGAAAATGAAGGCCATT

1196

ACAACAAAAAGTGTCTAAACTAAGTGCCAATCTGGGTCTTCCAGACCCCTATC  
ATGGTTCTATTCTGTATGGTACACTCTGTTGATTCAATCGCACCATCTTATATGTAG  
GAAGGCCAAACCGGCCGGCTGTGTTGGGTGGGATTCTGCAGGCCATGCAGTGAGGACG  
CCACTAGCTATAGACACACGCAGGAGACCCACGTTCTATTTCCATATGCCACTTGCCACT  
GACCTCAGAGAAATCATTAAACCCCTGAACCTCAGCTCCTTATCCTGAAAATGAAGGC  
[C, G]  
ATTCTACTTCTTAGGCCTCTGACAGGAGCCTGGGAGAGCCAACGGAGTAATTCCGG

**FIGURE 3GG**

TGACAGCGAAGAACTGGGAGGGACCGTGAECTCAAATTACTGAAGAAAAATAAGTTAAC  
 ATGCTCGGCTGGAGTTAGAATTCCACCCGCCCCACCGCCATGATCAAACCTGCAGT  
 CAGGCAGCAGCCCTCGAATTGATTCTTCTATGGACTGTCTCACATGCCAAACACCTA  
 TGTGCAGCACCCCTCCATCTCGTGGCTCTATTGATGTCTGCCTTGAGTGAAGCGC  
  
 2600 GCACTCGGCACAACCTCGGGACCGGCGCGCTGGACCGAGTCCCCTCCGCCA  
 GCTCACCTGGAGTCGGGGCAGCCCTGCCCCGCCCTGCACCCCTTGTGCTCTAGCT  
 TGCGGAACCTGCCGCTCCTCCACGCCAGGTAGTGAACGCCGCGCTCCAGGTCTCTGC  
 AGGCCCTGCCCATGGACAGCGCACCCATCACCACTCCCTAAGTGTGGCGCCGCCG  
 CTGCTTCAAGCTGCCACTGGGTCCTCGGCTGCCCTCTGGGTGTCCGAGAGGCC  
 [A, G]  
 GGGAGCGTGCACCATGAAGTCCCGCTTTCACCCGCTTCTTATCCTCTGCCCTGGAT  
 CCTAATTGTCATCATCATGTCGACGTGGACCGCGCAGGCCAGTGCCTGCCCTCACCC  
 GCGCCCTACTTCTCTCCCTACGCCGGGGCGGGGCCGACTCCCGCTCCGAG  
 GGGCGGCCGGCTCACGGGACCCAAAGCGCAACCGAGTCTCGGCCGCAGCCACAGCGGA  
 GCCGAGCTGCCACCATCTATGCCATCACGCCACCTACAGCCGCCGGTGCAGAAAGC  
  
 4797 TTGCTTTCTTAACCCAGGGCAGAGCTATTCTGACTCTCCAGTTAATTTCTGTGT  
 GGCTTTAAAAAAATTCTTAAGGTAAATTGCCCTTCATTCTATTCACTCTCTCTT  
 CATGAATAAAAGGCACAGTAATTGCTCTTCATCTTTCTTCCATCTTCACTGTAGA  
 GGGCTTTCTTCCACGTTCTCCAATGAATAAAAGCTTGGCATTGTATAGTATGGTC  
 CTTACTCAACCCAAGATTAGAGATACCATCTGACGTTTAACTGGCTTTAATCCTGC  
 [A, T]  
 TCAGTGCTCCCCCTCCAAAAGAAAAAGTGGCTTGCACTGAAGCAAAGACTGTACATT  
 TCAATGCACCAACATTAAACCGCAAGTCTTTTATTCTTCAACTTCGAAGT  
 TGCTCGTCTGTGACAATATGTGGCTTGAAGTAAATAGTCACATTACTGTTAAT  
 GAACACTGTAGGAGGCTAGATTGTAAGGGAGAATGATTAGTTATTCGAGCTCTAG  
 CCTCTGGTGTGAGGTGTTAGAAGAATTGGCACACGCAGGCAGTGAATGATTAGGACA  
  
 6461 ATGGTGCTTGTATCTCATACAGCTAACTAATTCAGCCTTCCTTCAACTGATCTG  
 CATTGCCAGGAAAGAAATATTGCAATTGAATACTCTTATGTTAACAGCCAAATCCATTG  
 CAAATGAAGTTAGTGTGAATCTAGCTACAGAAATGGGCTGTTATTGGAGAAGGAGG  
 TGGTGGGTTTTCAAGTTCAAAATCTCAACAGCTACTCCTCTTCCCTGTGGCATT  
 GATGGGTTTGCACTGTGGATCACAGGTAATCCTGCCCTGTGCATCCTATCCATCT  
 [C, A]  
 CCTCTCTGGAAAAGCTACTTGCAAGGATTAAGCTGTTAATAAAAGCCACAAC  
 AGATAAAATGTGACTTATTCTTACTCATGTTCAATAACACTATTGATCAGATTCTGT  
 TTTTCACCAAGAAAACCTTCAAGCTTCTTAATTAAACAGATGCTTCAAGGTGAAG  
 TTGGTTTCACCTCTGGAAATCAATGAATTGAAATACTAAAAAAATAGCACTTCCAA  
 GCAAGAAAAAAACCTTAGAAATTGAAAGTTAATGAAATAAGACTGGAAGACAGGC  
  
 6543 GCATTGAATACTCTTATGTTAACAGCCAATCCATTGCAAATGAAGTTAGTGTGAATC  
 TTAGCTACAGAAATGGCCTGTTATTGGAGAAGGGAGGTGGTGGGTTTCACTGTTCA  
 AAAATCTCAACAGCTACTCCTCTTCTGTGGCATTGATGGGTTTGCACGTGGAT  
 CACAGGTAATCCTGCCCTGTGCATCCTATCCATCTCCCTCTGTGAAAAGCTTACTT  
 GCAAAGGATTTAAGCTGCTTTAATAAAAGCCACAACACTACAGATAATGTGACTTATT  
 [-, T]  
 AGTCATGTTCAATAACACTATTGATCAGATTCTGTTTCACTGAGAAAACCTCTAA  
 GCTTTCTTAAATTAAACAGATGCTTTCAGGTGAAGTTGGTTTACCTCTGGAAATCA  
 ATTGAATTGAAATACTAAAAAAATAGCACTTCCAAGCAAGAAAAAAACTTTAG  
 AAATTGAAAGTTAATGAAATAAGACTGGAAGACAGGCTGGCTCTCAGACACTTAAGGG  
 TTATCAAAGGAGTCAGTGAATGAGATTGATCTAGAAGATGTTCTGGAAAGCAATGAAC  
  
 8419 TTTGCATACAATTAAATAATGTTAACCCATATCATGGATACAAGCAAAATATAG  
 TTGACATAATTGAGCATTACTATAGGCAAAGTACCCCTAGGGTTTACGTGTATT  
 ATTTAATCTTCAAAACCCCTGAGGTAGGTAAATAGTACTGTCTCTGTTGTTGCTGTT  
 TAATACTAATGCTAATATTAGTTATGGACGCGACTCCCTGGTGAAGTACAGAGGACTAA  
 ACAAAATGCAACCTGACGGTAATATAGTGTACCTCTGATCTATATAATCAGTATCCCC  
 [G, A]  
 TTTTTAACAGAACGACTAGGAAGTAACCTGAAAATGTATGCTGTAGCTTTAGTGGCAGAG  
 ATAGAATTGAAACCCAGGTGCCCTGGTCTAGCGCCTGATTGTTGACTGTCTGAAAC  
 TCATGTCAATTAAACACATGAAAATATGTATCATTATAATAAGTAAAGCAGCTGATTAGC  
 AGGAGCCTGTGATATTACTGTCTGCCATTGAAATTCAAGTCTTCTTCTTG

FIGURE 3HH

GTTATGTCAACTCTTAGCTTCTCCTTGACCTTTGTTACTTTTCCCTTTGTTGTT  
 8636 CTTGGTGAGTACAGAGGACTAAACAAATGCAACCTGACGGTAATATAGTTGTTACCTC  
 TGATCTATATAATCAGTATCCCCGTTTTAACAGAAGCACTAGGAAGTAACCTGAAAATG  
 TCATGTAGCTTATGTGGCAGAGATAGAATTGAAACCCAGGTGCCCTGGTTCTAGCGC  
 CTGCATTGTTGACTGTCCTGAAACTCATGTCATTAAACACATGAAAATATGTCATCATT  
 TAATAAGTAAAGCACCTGATTAGCAGGAGCCTGATATTACTGTCTGCCATT  
 [T, C]  
 TTGAATTCAAGTCTTCTTCTGGTTATGTCAACTCTTAGCTTCTCCTTGACCTTTG  
 TTACTTTTCTTCTTGTGTTAATGATTACATTGAAAATAAAATTTTTTTTG  
 CAAGAAAATGTACTTATTAGCTTCTTGTGTTCTGGGGTGTGATCTCCTGGATATTCT  
 TTATTATTATTATTATTATTACTTTAAGTTTAGGGTACATGTGACAAATGT  
 GCAGGTTAGTTACATATGTATACATGTGCCATGCTGGTGTGCTGACCCATTAACTCGTC  
 17222 ATTGAGCCCTTAAATAGAAACTGGAAGATAAAACGTGGTCCCTACTCTGATTCTAAGAGC  
 TTTTATACTAAAAGGAAAGAGAATGTCACTGACCATTTATGTATATAGCAAGGCATTACCA  
 TCAACAGCCTTAAAGGGGAGGTTGTCAAGGTGGTCGTGAGTCAGTTGAGTATTGGC  
 CTCTTCACACGTGTGAGAGGCTGGAGGCTGGGGAGCTCACATAGCGTAACAGCCCA  
 TGTTCAAATCCAGCTTCACTGCTTAGTGTGTTGCAATTACATTGCAAGGGTGTGACTGCCTC  
 [-, C, G]  
 AGTGATTGTTTAAGTGCTCTAGGCAAGTAATAAATATTAGTTCTTTGCCTTGTCTT  
 TCCACTATGGGTGACTGCCCTAATGAGGGTATACCAGATAATTGCACTGTCTTGATTG  
 TTAAGTGCCCTAAATGTTCTCTGACATCTGGACTATGTTCTAGAGGCCTAGGGG  
 GAGGAGGAGGTAAGGCACTGACTTCCAAATTAGTGTACCCAGTGGAACTGCAT  
 AAATTGGGTACCTTAATTACACCATTGGTATTACTAGGGTATTACAGGGACAAGAGTT  
 49439 TTATTATCTCGTAATCACTGCTTGAAACTACTTTGTCGATATTAAATAAGCCACA  
 GTAGCTTCATACACCTCTTGTGTTACATATGATTCCCATATTCTTTATCCCATCTAT  
 GTTATTAAATGTCCTGTCAATAGTATATAGTTGTTCTGTTCTTATTCAATTG  
 TTTTCCTGATACTCTTCCAAATTAAAGGAGGTAATACTGTAAGCAAAGCCTTATTAA  
 CATAAAACACTGCTGTGATCTTAACTACCAAAATAACAGCCCTAGCATGTTGTTGTTG  
 [A, T]  
 GAGAGAGAGAGTGTGTAATGTGTTGTTGGGTTCTGAATTAGATTTC  
 GATCCACCTACATCTTACTTTGGCCTAAGTAATGGTGGTCATGTAACGTGTTAAAA  
 TATTAATCTTTCTGAAAGCTACAAAGAGTCATGTCTACTTACTGTTCTAGGAAAAGTT  
 TTTTCAAATTGGGAAGTGTCTACCTTTAAATATTCTGAGAGTGTAAATTACTTC  
 TATGATCTAAAGGTTCTCCATTACTTTATCCAGCTGTCACTATTCTGAGTAT  
 49612 CATTGGTTTCCCTGATACTCTTCCAAATTAAAGGAGGTAATAATCTGTAAGCAAAGCC  
 TTATTACATAAACACTGCTGTGATCTTATACCAAAATAACAGCCCTAGCATGTTGTTG  
 GTGTTGAGAGAGAGAGTGTGTAATGTGTTGTTGGGTTCTGAATTAGATT  
 TCTTCAAGATCCACCTACATCTTACTTTGGCCTAAGTAATGGTGGTCATGTTACT  
 GTGTTAAATTTAATCTTCTGAAAGCTACAAAGAGTCATGTCTACTTACTGTTCTAG  
 [G, T]  
 AAAAGTTTTTCAAATTGGGAAGTGTCTACCTTTAAATATTCTGAGAGTGTAA  
 TTACTTCTATGATCTAAAGGTTCTCTCCATTCTTACTTTATCCAGCTGTCACTATT  
 TGAGTATGTTTCCACAGGAGAACCTGAGAAATTCTTCTTAGATTGAGTATA  
 GAGATAAGATTATCTGCATCCAGTCAACCTGTTAATATAATTCTATGCAAGTT  
 CTCTTGTGTTATTCCATTCTTAGTCACTATTCAATGTT  
 69716 CAGAAAAAAGGTGAGATAAGTAAGGAAGCCAAGGGCTGGGAAGGTGGAGGGCCAGTTGT  
 TGGAATTGACCGTCCGCCAAATGTTAATAGAGGGAGAAGTGACATTGGCTGAATTCCAC  
 ACACACTGAATGTAGCAGCCCTCGCCTCAAGGAGTTTGATCTAGCAGAGAGAATG  
 TCTACAAGAGCATGGCAGATACATCGTGGGGTCGAAAATGAGTACAAGTGGAAATGATTGG  
 GGGTTACATTAAAGAGAAAACCACAGCCACTGGGGAGTTCGGGAAAGGTCTGGAA  
 [G, A]  
 AGGTGACATCTGAGAGGGCACCTCCGTCTAGGCCAGGGCAGGGTAGGGAGGGATCATG  
 GGCAGGGTGTGTTTGGAACAAAGTTATCCAGGGTATGTTGAGCTTGGGAAGGGCAA  
 GCTGGGGTCAGATAGTGGACTGAGTGTCAAGATGAGAAGTTTCTTCAATTCTGTGG  
 ACATTGGAGAGTCTGACATTTCAGTAGGGACTGATGTTGATTAGAAATACAGTTGA  
 GAACCACATGTTGGCAGTGTGGATGAATGGGGAGGAGGGCTGGAGGCTCAGG  
 69742 AGCCAAGGGCTGGGAAGGTGGAGGGCCAGTTGTTGAATTGACCGTCCGCCAAATGTTA

FIGURE 3II

ATAGAGGGAGAAGTGACATTGGCTGAATTCCACACACACTGAATGTAGCAGCCCCCTCGC  
 CTCAGGAGTTTGATCTAGCAGAGAGAGAATGCTACAAGAGCATGGCAGATACTCG  
 TGGGGTCGAAATGAGTACAAGTGGATGATTGGGTTACATTAAAGAGAAAACACA  
 GCCACTGGGGAGTTCGGGAAAGGTCTGGAAAGAGGTGACATCTGAGAGGCACCTCC  
 [G, A]  
 TGCTAGGCCAGGCCAGGGTAGGGAGGGATCATGGCAGGGTGTGTTTGGAACAAAGTT  
 ATCCCAGGGTATGTAGCTCTGGAAAGGGCAAGCTGGGTCAGATAGTGAGGACTGAG  
 TGCTAAGATGAGAAGTTTCTCATTCTGAGACATTGGAGAGTCGACATTCAA  
 GTAGGGGACTGATGTGATTAGAAATACAGTTGAGAACACATGTTGGCAGTGTGGATG  
 AATGGGGAGGGAGGGCTGGGCTGGGAGGCTCAGGCAGCCATCTGGTAATGAGCCGGTAG

69920 CGTGGGGTCGAAATGAGTACAAGTGGATGATTGGGTTACATTAAAGAGAAAACCA  
 CAGCCACTGGGGAGTTCGGGAAAGGTCTGGAAAGGGCAAGCTGGGTCAGATAGTGAGGACT  
 CCGTGTAGGCCAGGGTAGGGAGGGATCATGGCAGGGTGTGTTTGGAACAA  
 GTTATCCCAGGTATGTAGCTCTGGAAAGGGCAAGCTGGGTCAGATAGTGAGGACT  
 GAGTCTAAGATGAGAAGTTTCTCATTCTGAGACATTGGAGAGTCGACATT  
 [C, T]  
 AAGTAGGGACTGATGTGATTAGAAATACAGTTGAGAACACATGTTGGCAGTGTGGGA  
 TGAATGGGGAGGGAGGGCTGGGCTGGAGGGCTCAGGCAGCCATCTGGTAATGAGCCGGT  
 AGCGGGCTGGAGGTGAGAGGAGGTCTAAATACCACAGCTATTGGGACTTATAAAATT  
 TTAACAGCCTTTCAGATTATACTCTAAATCAGCAGACACTTAGATCTTTAACACCTT  
 TTTCTGTTGATGGTATAATGATGTTAAATTAAAGTTGGTAAATTAA

70038 TTCCGTCTAGGCCAGGCCAGGGTAGGGAGGGATCATGGCAGGGTGTGTTTGGAAC  
 AAGTTATCCCAGGTATGTAGCTCTGGAAAGGGCAAGCTGGGTCAGATAGTGAGGA  
 CTGAGTCTAAGATGAGAAGTTTCTCATTCTGAGACATTGGAGAGTCGACATT  
 TTCAAGTAGGGACTGATGTGATTAGAAATACAGTTGAGAACACATGTTGGCAGTGTG  
 GGATGAATGGGGAGGGAGGCTGGGCTGGAGGCTCAGGCAGCCATCTGGTAATGAGCC  
 [C, G]  
 GTAGCGGCTGGAGGTGAGAGGAGGTCTAAATACCACAGCTATTGGGACTTATAAA  
 TTTAAACAGCCTTTCAGATTATACTCTAAATCAGCAGACACTTAGATCTTTAACACC  
 TTTTCTGTTGATGGTATACTGAGCTTAAATGATGTTAAATTAAAGTTGGTAAATTAA  
 ATTGGTGTAAATTGTTATATCCTTGAGCTGAAATTATGTTAGAAATACAGTGATGT  
 TGGTAATTAAACATTCTTTAACAGAACACCTATTGTTGAAATTAGGAGTCGCA

70956 CACCTTACTATTCTGTTCCCTCTACTCAATCTTGCGGGCAGAGATCACTTCCCTCAG  
 CACATTCTACCCCTCCCTTGGGCTGCACTGATGCCCTGCCTGAAATGCTCCTCC  
 TCGTTCAGCCCTACTCATCCTCAAATCTCAGCTAAAGGCTGCCCTTGGGGAGGTT  
 TTGCTGATGCTTCAATTAAAGATAGCTCCTCCGTGTTATAATGTCGTTCTCTCAGCCT  
 CCCATACCTCTGCACCTTGTACAGTGGTGTACATCTCTCATTATAATTGTTGAGGCTC  
 [C, T]  
 GCCACCCCCACTCCCAGAATGCATCTTCTGTAGGCAGAAGCCGGACTATCCTGCCCTC  
 CACTCCTGCCAATCCCAGGCCAGGTTCCCTAGCCCCAGCCTGTGAGTGGGCTGA  
 GTGACGGCACTATCCCAGAGCAGCTGCCCCCTACAAGTTACCAGGCAAACCTTAA  
 AAATTATTATAAAATGATGACCATGAAACTGGAGGGGTCAGGGATCACTCTGGCAGGT  
 TGCTGAAGCCTGTTCTGAGGACATGGGAATGACAGTTATTCTGGGG

71021 TCTACCCCTCCCTTGGGCTGCACTGATGCCCTGCCTGAAATGCTCCTCCTCGTT  
 CAGCCCTACTCATCCTCAAATCTCAGCTTAAAGGCTGCCCTTGGGAAAGGTTTGCT  
 GATGCTTCAATTAAAGATAGCTCCTCCGTGTTATAATGTCGTTCTCAGCCTCC  
 ACCTCTGCACCTTGTACAGTGGTGTACATCTCTCATTATAATTGTTGAGGCTCGCCA  
 CCCGACTCCCAGAATGCATCTTCTGTAGGCAGAAGCCGGACTATCCTGCCCTCCACT  
 [A, C]  
 CTTGCCCAATCCCAGGCCAGGTTCCCTAGCCCCAGCCTGTGAGTGGGCTGAGTGAC  
 GGCACATATCCCAGAGCAGCTGCCCCGCTACAAGTTACCAGGCAAACCTTAA  
 ATTATAAAATGATGACCATGAAACTGGAGGGGTCAGGGATCACTCTGGCAGGTTGCTG  
 AAGCCTGTTCTGAGGACATGGGAATGACAGTTATTCTGGGCTCC  
 TTCACTCTCAATGTTGT

71547 TTATTCTGGTCTCCTCATCTCAATGTTGTCACAAAGGAATTTCCTGGGTTAATT  
 ATTGGCAGACCTTTCTCAGTAGATAATGCTGTGATCAGCTCAGCCAGCCGATCA  
 GATGATCATCAAAGCAAATGAGCAGTCAAATTAAATGACGTTTGCTTCTCATGAA  
 TATAAAACTGCAAGAAAATGGAGGGATTGCTTCCGCCACTTTGGAGTCATTGTGA

FIGURE 3JJ

TTTAAGTGTGCTTTCCATGCATGAATGTTCTATGAGAACTATAAAGTTACTGAAT  
 [G, C]  
 TTCTCAGTAGAGTGACTTGTGATGTGTCATGTGGTACCTTCTAGTCAGGATCTAGGGACCA  
 GCTTGGGACTTGTCTGGTTGGTACAGTGTGATGTGTCACCGGGAGGGACTGCAGCT  
 GCCAGGGGGTGGTAATTCTGCCCCAACACTTATAGAACCCACAGGGACAGGTGGCAGAGT  
 GTTGGGCAATAGGCAGCCTGCCACTCAGTTTAATCTATTCTAGAACATGGTGCAGT  
 CTAGAGACTTGCAGGGATTGATGCCACAGTACTGTGTCGGTCTGTGCATGTGCT

71592 TGCCCTGGGTTAATTATGGCAGACCTTTCTCAGTAGATAATGCTGTGATCAGCTTCA  
 GCCCAGCCCGATCAGATGATCATCAAAGCCAAATGAGCAGTCAGGAACTTAAATGACGTTT  
 GCTTGCTTCATGAATATAAAACTGCAAGAAAATGGAGGGATTGCTTCTGCCACTT  
 TGGAGTCATTGTGATTAAGTGTGCTGTTTCCATGCATGAATGTTCTATGAGAACT  
 ATAAAGTTACTGAATGTTCTCAGTAGAGTGACTTGATGTGTCATGTGGTACCTTGTG  
 [C, G]  
 AGGATCTAGGGACCAGCTGGGACTTGTCTGGTTGGTACAGTGTGATTGTACCCGG  
 GAGAGGACTGCAGCTGCCAGGGGGTGGTAATTCTGCCCCAACACTTATAGAACCCACAGG  
 GACAGGTGGCAGAGTGTGGGCAATAGGCAGCCTGCCACTCAGTTTAATCTATTCT  
 AGAACATGGTGCAGTCTAGAGACTGCAGGGATTGATGCCACAGTACTGTGTCGGTC  
 CTGTCTGCATGTGCTGGCCAGGGCTGTGCTGGTAGAGGTGGCGTGTGGGCAAGGGA

71601 TAATTTATTGGCAGACCTTTCTCAGTAGATAATGCTGTGATCAGCTTCAGCCCAGCCC  
 GGATCAGATGATCATCAAAGCCAAATGAGCAGTCAGGAACTTAAATGACGTTTGTCTT  
 CATGAATATAAAACTGCAAGAAAATGGAGGGATTGCTTCTGCCACTTGGAGTCAT  
 TCGTGATTTAAGTGTGCTGTTTCCATGCATGAATGTTTCTATGAGAACTATAAAGTTA  
 CTGAATGTTCTCAGTAGAGTGACTTGATGTGTCATGTGGTACCTTGTGAGGATCTA  
 [G, A]  
 GGACCAAGCTTGGGACTTGTCTGGTTGGTACAGTGTGATTGTACCCGGAGGGACT  
 GCAGCTGCCAGGGGGTGGTAATTCTGCCCCAACACTTATAGAACCCACAGGGACAGGTGG  
 CAGAGTGTGGGCAATAGGCAGCCTGCCACTCAGTTTAATCTATTCTAGAACATGG  
 TGCACTAGAGACTTGCAAGGGATTGATGCCACAGTACTGTGTCGGTCTGTGCA  
 TGTGCTGGCCAGGGCTGTGCTGGTAGAGGTGGCGTGTGGGCAAGGAGCACATGTG

72024 GAGTGTGGGCAATAGGCAGCCTGCCACTCAGTTTAATCTATTCTAGAACATGGT  
 CAGTCTAGAGACTTGCAGGGATTGATGCCACAGTACTGTGTCGGTCTGTGCA  
 TGCTGTGCCAGGGCTGTGCTGGTAGAGGTGGCGTGTGGGCAAGGAGCACATGTCA  
 TCTGTGTGCTCATACTCAGGGTGCTGGAGCAGCTGGTAGTGGTAGTGGGTCAGGTGGG  
 TGGACGTGGAGAGGGAGGGCTGTGAGGCCCTTCAGGGCTGAAGGGAAAGTGGGAGA  
 [C, G]  
 GGGTTTCCAGGCCTGTCCACCTCAATTCTAGCAGCTTCGATTTACATATTGGAGATC  
 CCCTCAGGATTTCAATGAAATAAAACATTCACTCCAGGACTAAAATTGAAACCTGA  
 AGTTTTCTTCTATCAGGATGTCCAGCAGACTCAATAATTATATATTGTTGCTTAGCA  
 TTTACCAAGCATCAGGCATTGGAAGCATTCTGTGTTCTTCATGAATCCTCACTTA  
 GCTGTGCAAGGGATATGCTAGTTTATTATCCCCACTTACATATAAGGAGCCGAGGCCT

72161 TGCTGGTAGAGGTGGCGTGTGGGCAAGGAGCACATGTGATCTGTGTGCTCATAC  
 AGGGTGTGCTCTGGAGCAGCTGGTAGTGGGTCAGGGGGTGGACGTGGAGAGGGAG  
 GGCTCTGCAGAGGCCTTCAGGGCTGAAGGGAAAGTGGGAGACGGGTTCCAGGCCTCT  
 GTCCACCTCAATTCTAGCAGCTGCAATTACATATTGGAGATCCCTCAAGATTCAAT  
 GGAATAAAACATTCACTCCAGGACTAAAATTGAAACCTGAAGTTCTTCTATC  
 [A, G]  
 GGATGTCAGCAGACTCAATAATTATATTGCTTAGCATTACCAAGCAGCATCAGGC  
 ATTGGAAAGCATTCTGTGTTCTTCATGAATCCTCACTTAGCTGTGCAAGGGATATG  
 CTAGTTTATTATCCCCACTTACATATAAGGAGCCGAGGCCTAGGTATGCTAAGTGAGT  
 TGTCTGGGATTCAAGAGTCAGGCCAGTGTCTACAGAGATGGTCTCCAACTCACCCACCT  
 ACAGCCAAGTCACTGAGTTCTGGTCTGTGAGCCTGCAGAACAGTTCTGGTTCTTC

72259 TGGGGTGGACGTGGAGAGGGAGGGCTCTGCAGAGGCCTTCAGGGCTGAAGGGAAAGTGG  
 GGAGACGGGTTCCAGGCCTCTGTCACCTCAATTCTAGCAGCTGCAATTACATATTG  
 GAGATCCCCCTCAAGATTCAATGAAATAAAACATTCACTCCAGGACTAAAATTGAAA  
 ACCTGAAGTTCTTCTATCAGGATGTCCAGCAGACTCAATAATTATATTGTTGC  
 TTAGCATTACCAAGCATCAGGCATTGGAAGCATTCTGTGTTCTTCATGAATCCT  
 [C, T]  
 ACTTAGCTGTGCAAGGGATATGCTAGTTTATTATCCCCACTTACATATAAGGAGCCG

## FIGURE 3KK

GGCCTAGGTATGCTAAGTGAGTTGCTGGGATTCAAGAGTCAGGCCAGTGTGTCTACAGAG  
 ATGGTCTCAACTCACCCACCTACAGCCAAGTCAGGTTCTGGTCTCTGAGCCTGCA  
 GAACAGTTCTGGTTCTTCATCTGCAGAACAGGGAAAATGAAATTTCACAAAATCA  
 GACATCACGTGCAAAGCAGCCAGGAGTAGAACATTGTAGACACTTGGTAATGTCAC  
  
 72363 CTGCATTTACATATTGGAGATCCCCCTCAAGATTCAATGAAATAAACATTCACTCCAGG  
 ACTAAAAAATTGAAAACCTGAAGTTTCTTCTATCAGGATGTCCAGCAGACTCAATA  
 ATTATATATTGTTGCTTAGCTTACCAAGCATCAGGCAATTGGAAAGCATTCTGTGTT  
 TTTCTTCATGAATCCTCACTTAGCTGTGCAAGGGATATGCTAGTTTATTATCCCCACTT  
 ACATATAAGGAGGCCGAGGCCTAGGTATGCTAAGTGAGTTGCTGGGATTCAAGTCAGG  
 [T, C]  
 CAGTGTCTACAGAGATGGTCTCCAACCTCACCCACCTACAGCCAAGTCAGTGTCTT  
 GGTCTCTGAGCCTGAGAACAGTTCTGGTTCTCATCTGCAGAACAGGGAAAATGAA  
 ATTTTCACAAAATCAGACATCAGTGCAGAACAGCAGCCAGGAGTAGAACATTGTAGACACT  
 TGGTGAATGCACTCTAACCAAGAACAGACTGTGCCTTGGGTCAGCTGGCTACAA  
 CATTATTTGATGAATTAGGTAGTGTGTTGATTACAGTGGTAGGTCATG  
  
 72639 AGTTGTCTGGGATTCAAGAGTCAGGCCAGTGTCTACAGAGATGGTCTCAACTCACCA  
 CCTACAGCCAAGTCAGTGTCTGGTCTCTGAGCCTGAGAACAGTTCTGGTTCT  
 TCATCTGCAGAACAGGGAAAATGAAATTTCACAAAATCAGACATCAGTGCAGAACAG  
 CCAGGAGTAGAACATTGTAGACACTGGTAGATGCACTCTAACCAAGAACAGACTG  
 TGCCCTTGGGTCAGCTGGCTCACACATTATTTGATGAATTAGGTAGTGTGTTGTT  
 [G, C]  
 ATTATCACAGTGGTAGGGTCCATGCAGGTAGCTGTAGGGGAGAACATCACTCATCCTG  
 GGTCTCTGCTCTGACACCTACAGGCTGTGAGCCTGAAGATCTAGGGGAAATATCTGTTCT  
 TCCTAATACCTGTAGATTAGGGATCATTGCTCTCTAACACATTGTAGATTAGGGATCA  
 TTGCAACAGCTTCTGGGTTGTTGAGGTTGAAGTAAACGAATACATACAGAACAGTCC  
 TGCTGTTCTGTGAATATTGAATCTGCACCCACTGTAGCTTGAGATCACTCTAAC  
  
 72698 ACCTACAGCCAAGTCACTGAGTTCTGGTCTCTGAGCCTGAGAACAGTTCTGGTTTC  
 TTCACTGCAGAACAGGGAAAATGAAATTTCACAAAATCAGACATCACGTGCAAAGCA  
 GCCAGGAGTAGAACATTGTAGACACTGGTAGATGCACTCTAACCAAGAACAGACT  
 GTGCCTTGGGTCAGCTGGCTCACACATTATTTGATGAATTAGGTAGTGTGTTGTT  
 TGATTATCACAGTGGTAGGGTCCATGCAGGTAGCTGTAGGGGAGAACATCACTCATCCT  
 [T, C]  
 GGGTCTCTGCTCTGACACCTACAGGCTGTGAGCCTGAAGATCTAGGGGAAATATCTGTTTC  
 TTCTTAATACCTGTAGATTAGGGATCATTGCTCTCTAACACATTGTAGATTAGGGATC  
 ATTGCAACAGCTTCTGGGTTGTTGAGGTTGAAGTAAACGAATACATACAGAACAGTCC  
 CTGCTGTTCTGTGAATATTGAATCTGCACCCACTGTAGCTGTGAGATCACTCTAAC  
 CGGTAGTATTAGAACATTGAACCTCCGCTGGGCTCATGATGAACCTCATTCTCTT  
  
 72716 GAGTTCTGGTCTCTGAGCCTGAGAACAGTTCTGGTTCTCATCTGCAGAACAGGG  
 AAAATGAAATTTCACAAAATCAGACATCACGTGCAAAGCAGCCAGGAGTAGAACATTG  
 TAGACACTGGTAGTCACCTAACCAAGAACAGACTGTGCCTTGGGTCAGCT  
 GGCTCACACATTATTTGATGAATTAGGTAGCTGTGTTGTTGATTACAGTGGTAG  
 GGTCCATGCAGGTAGCTGTAGGGGAGAACATCACTCATCCTGGGCTCTGCTGACAC  
 [C, A]  
 TACAGGCTGTGAGCCTGAAGATCTAGGGGAAATCTGTTCTCTAACACCTGTAGAT  
 TAGGGATCATTGCTCTCTAACACCTGTAGATTAGGGATCATTGCAACAGCTTCTGG  
 GTTGTGTTGAGGTTGAAGTAAACGAATACATACAGAACAGTCTGTGTTCTGTGAATAT  
 TTGAATCTGCACCCACTGTAGCTTGAGATCACTCTAACGGTAGTATTAGAACACA  
 TTGAACTCCGCTGTGGGCTCATGATGAACCTCATGATGAACCTCATTCTCTGGGGGG  
  
 86903 AATTGGGAAATATTGAAAGAGAACATGAAAATGGAAAACACATATGAAAACCTATGGGG  
 GTACAGGCCAGAGTAGTGCTTAGCAGGACATTATAGCTTCACATACCTCCATTAAAAAGA  
 AGAAAAGATCTCAAATCAATAACCTAACCTCTGCCATAAAAAACAGAAAAAGAGTA  
 AACTCAAATAAGCAGAACAGGAGTTAGGATAGAACATACAGAACATATAAAACAA  
 TATAAGAAAATC  
 [C, A]  
 ATAAAAATGTTTTAAAAACCAACAAATTGGGAAACCTTACTTAGACTGTCAAGAAAA  
 AGGAGAGAACGCTCACATTACTAAACAGGAATGAAAGCACGAATATTAATACCAACCT  
 TACATAAATTGAGAACATTGTTAAAAATTGATTGCAACAAATTAGATAACCTATA  
 TGAAAATGGACAAATTATTGAAATGACTATTAAACTGTCTCAAAAATCTAAATAGGC

FIGURE 3LL

CTATAACAGAGA

89261 GACTTACACAGGAAACTATAAAATACTGAAATGAAGAACTAATAAGTGGAAAGATA  
TGTTCATGGATTAGAAGACTTAATATTGTTATGGTCAGAAGACTTAATATTGCTAAAT  
GGCAATATTCCCCAATTAATCTACAGATTCAATGCAATTATCAAATTCTGGCTGC  
CCTTTTGAAAAATTGACAAGGTATTGTTCTAAATTGATATGAAAGTGTACT  
CAGAAAGAAGTTAGGGATTTACTTCCAAATTGAAACTTATAAAACTACAATAATG  
[C, T]  
CATCACAGATGGAGCGACATGCACCTTATAGTCCCAGCTACTCAGGAGGCTGAGGCAGG  
AGCATCCCTCGAGGCCAGGAGTTGAGACCAGCCTGGACAACATAGGAAGACCCGTCTC  
AACTTAAAGAAAGCAAACACTACAGTAATACAGTGTGGTACTGACATAAGGATAGCCATATA  
GATTAATGAAATAGAACTGACAGTGTAGAAATAATCATTATGGTCAGTTGATTTGC  
CAAAGGTTCTAAGACAGTTCAATGGAAAAAAAGTCTTCTCAAAATTGGTCCCAGAGT

95175 CAGTGGAGTCTTCATACCTCAATTTCATCAAACATTGAGTTGAAGTGTACACTTC  
TCTCGCAAATAAAGAAATGGGAAGTTAGAAAATCAAGAAAGGTTAAATGAGTTGCCAG  
TGTCCCAGGGCAGGGACCTAGGCAAAACAAAAGGCTCTAATTCAAATCCAGTATT  
TCTGCTAAATGTGCCACCTCCCTTAGGGTTGGTGGAGGTATCGATACTGGGCT  
AGTCCTACAGCTAATGTTATGATTCTTGTTCTGCTTCACTCAGCACCTGCTGTACCA  
[T, C]  
GTTATGTTGTAAGTGGCTTAGTGTAACTTTCTCAAAGGCAGCAGGGCTGGAACA  
GGAGACTGCCAGCTGGCATCTGGAGAGGATGGTGGTGTGGTACAGCTCCT  
CCATTACACCTGGTATCATTAGTATTACTTGCAAACCTGAATCAAATCAACTCATT  
TAATGTAGAGAAGGGCAAAGTGTGAGAAATGTTGTTGGGTGGTGCAGGAGCTTC  
AACTCTGGAGGGTGCCTGACTTGACAGTATCACCTTAGTCACTAAGAAAAAGAGATCC

96648 CAACAGACTAACTCCTATTTCGCTAGATGCTCTGCAACGCCTTTATTTCACGG  
AATGAAAAATATTGTAATGACTGATTTCCCTTGAGACTGTAATACAGGTAATGTCCTA  
TTCAACTTTGTAACCAAGACCTGACACACAGTAGGTATTAAAGTCTCTTTTT  
ACCAAAATTATACAGAAAAAGAGAAGTACACCAGGATTAAAGTCTCTTTTT  
TTATTTCACAAAGGATTGCTGTAAGTCTCAAGTCATTGTCATCCAAAGCTG  
[T, G]  
ATTTAAGCGTCGTGGATCCCAGCCAGGGATGCAAGAATCTGACTTTCTCAAACAGATAAC  
AACAGTCGAAGAACTGGAACCGAAAGCAAATAACTGCACTAAGGTATTCACTACATTGT  
GCTGCCGACCTCGAGTGTACCATGAAAGAGTGCCTACCCAGCTATTCTCCCTT  
CAGGTTCTCGTGTGGCACACTCGGACAGAGAAGGTTAATCTAGCAACGAGCAAAGTAC  
CACCTGGACACAGTAAAAATTGAGGTATAAATTGAAAGCAGCACTGGTGCAGTTGTCCA

99242 AGCATCTAACCTCTGATTCTCTACTTCCAAAATTGGTGATAAGAGAAGGAAAGGCAA  
GATTTACCATATAGTGAGTGGGTTAAAACCTACACTCAGAGTTAGACTGTGTTCTTAAT  
TTAACATTTGACTTGACTTATTACAGTTCAAAAGACACTAACATAAAACTACATCACT  
AATCAGGCATAAGTGTCTGAAGAAGCAGATCACGTCCTCATACCTACTAAAGGACATT  
AACACCTGTCGTGGCCAGTAGATTGCACTGATGGAGTGCTGGAGAACAGCATCACCC  
[A, G, T]  
TCTGCATTATCTGAAAGTAAGAGCCAGTATTAACTCCTCCTGGTCATCTAGCACCTTA  
ACCTGAGCTGGGTGTGCTTCAGCATGTTGACCATGTGACTGACACTTAGCACATACAATT  
TTTAGATTCCAGCGGGTAGAGACCAATGTTACCTATATTCTTGAAATGGTGGTAG  
CAAATTAACTGTGATATAGTGATTGCTAATGTTAGAAATCACTCTAGACTATTCC  
CTGAATGCTCTAAAGGAAAACAAGTGACCAAACAGAAACCAAGATTGCCAAATGCTGG

99349 CTGTGTTCTTAATTAAACATTTGACTTGACTTACAGTTCAAAGACACTAACAT  
AAACTACATCACTAACAGGCATAAGTGTCTGAAGAAGCAGATCACGTCCTCATACCTAC  
TAAAGGACATTAAACCCACCTTGTGCTGGCCAGTAGATTGCACTGATGGAGTGCTGGAG  
AACAGCATCACCCTCTGCATTATCTGAAAGTAAGAGCCAGTATTAAACTCCTCCTGGTT  
CATCTAGCACCTAACCTGAGCTGGGTGTGCTTCAGCATGTTGACCATGTGACTGACACT  
[T, C]  
AGCACATACAATTTTAGATTCCAGCGGGTAGAGACCAATGTTACCTATATTCTTG  
TAAATGGTGGTAGCAAATTAAACTGTGATATAGTGATTGCTAATGTTAGAAATCAC  
TCTAGACTATTCCCTGAATGCTCTAAAGGAAAACAAGTGACCAAACAGAAACCAAGATT  
GCCAAAATGCTGGAGGAACATCAATGGAAAGTGTAAAAGGAAGAAGAGTGGGAGCATGAA  
CCTCTCTAAGAGCCTTGTGCTGTGAGCTAGAGAAAAGTCAGAACACAGCACCTGAAATA

99443 GAAGCAGATCACGTCTCATAACCTACTAAAGGACATTAAACCACCTGTCGTTGCCAG

FIGURE 3MM

TAGATTGCACTGATGGAGTGCTGGAGAACAGCATCACCCCTCTGCATTATCTGGAAGTAA  
GAGCCAGTATTAACCTCTGGTCATCTAGCACCTAACCTGAGCTGGGTGTGCTTC  
AGCATGTTGACCATGTGACTGACACTTAGCACATACAATTAGATTCCAGCGGGTA  
GAGACCAATGTTTACCTATATTCTGTAAATGGTAGCAAAATTAACTGTGATATAT  
[A, G]

GTGATTGCTAATGTTAGAAATCACTCTAGACTATTCCCTGAATGCTCTAAAGGTAAAA  
CAAGTGACCAACAGAACCAAGATTGCCAAATGCTGGAGAACATCAATGGGAAGTGT  
AAAAGGAAGAAGAGTGGGAGCATGAACCTCTAAGAGCCTTGTCTGCAGCTAGAGA  
AAAGTCAGAACACAGCACCTGAAATAGAAATGTTCTATCTCAGCTCTAACTTAGGTAGAA  
ATAGGATTTATAATATGAGGGGATGTCTGGTCACACCTTATGGGAATTGAATCTTTT

99867.

AGGAAGAAGAGTGGGAGCATGAACCTCTCTAACAGGCCTTGTCTGTGCAGCTAGAGAAAA  
GTCAGAACACAGCACCTGAAATAGAAATGTTCTATCTCAGCTCTAACTTAGGTAGAAATA  
GGATTTATAATATGAGGGGATGTCTGGTCACACCTTATGGGAATTGAATCTTTGTA  
CTCTTTAAACATAAAAGTCATTATAGGGTATGAAAAAGAAAATACAACCTTACAAAG  
GTTTCTCAACAAAAGAATTTCACAGAGCCATGGGCAGTAATCATCCGACCTGAAAAAA  
[T, C].

AGCCTTAGATCCCTCATAAAATAGTGCTTGAGAATATGAGGCTAGATT

## FIGURE 3NN